DOCUMENT RESUME

ED 188 611 IR 008 475

AUTHOR	Line, Maurice B.: And Others
TITLE	National Interlending Systems: A Comparative Study of Existing Systems and Possible Models.
REPORT NO	PGI/78/WS/24
PUB DATE	Oct 78
NOTE	314p.
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Comparative Analysis: *Interlibrary Loans: International Organizations: *International Programs: Library Cooperation: *Models: *National Programs: Program Evaluation
IDENTIFIERS	Interlending Systems

ABSTRACT

This work evaluates current interlending practice and various models of interlending provision among participants in the United Nations Educational, Scientific, and Cultural Organization. It outlines the elements necessary in an interlending system and assesses the impact of technology on interlending. Factors relevant to the design, and criteria for judging the effectiveness of interlending systems are presented. Current practices are summarized as far as possible, and in the light of such information, potential basic and combined models are suggested. Factors telling against efficient national interlending systems are enumerated and the relationships between national interlending systems and other elements requiring national policy decision making are identified. The mechanics of interlending are also briefly considered. On the basis of these findings, conclusions are drawn and further studies are recommended. A part of the study describes interlending practices of each of 43 countries and national groups. The reprint of a paper on principles of national interlending systems and a bibliography of 309 citations are included. (Author/PAA)

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PARIS, October 1978
Original: English

UNITED NATIONS EDUCATIONAL,
SCIENTIFIC AND CULTURAL ORGANIZATION

General Information Programme

NATIONAL INTERLENDING SYSTEMS: A COMPARATIVE STUDY OF EXISTING SYSTEMS AND POSSIBLE MODELS

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PREFACE

This study, prepared under contract to Unesco by the IFLA Office of International Lending, has been carried out by Maurice Line, Director-General of the British Library Lending Division and Director of the IFLA Office for International Lending, Antonio Briquet de Lemos, Assistant Professor in the Department of Librarianship at the University of Brasilia, Stephen Vickers, Assistant in the IFLA Office for International Lending, and Sidney Smith, Head of International Services at the British Library Lending Division.

The work attempts to evaluate current interlending practice and proposes various models of interlending provision. It outlines the elements necessary in an interlending system and assesses the impact on interlending of technology. Factors relevant to the design, and criteria for judging the effectiveness of interlending systems are presented. Current practices are summarized as far as possible, and in the light of such information, potential basic and combined models are suggested. Factors telling against efficient national interlending systems are enumerated, and the relationships between national interlending systems and other elements requiring national policy decision making are identified. The mechanics of interlending are also briefly considered. On the basis of these findings, conclusions are drawn and further studies are recommended. The document is of relevance to all those involved in interlending but is of particular significance for those involved in making overall decisions on matters of policy and design.

This preliminary version issued in a restricted number of copies, is being circulated among National Library and UNISIST national focal points officials with a view to obtaining their comments prior to the final editing.

The designations employed and the presentation of the material in this study do not imply the expression of any opinion whatsoever by Unesco concerning the legal status, the regime or the frontiers of any country or territory. The opinions expressed are the authors' and do not necessarily reflect the views of Unesco.

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SUMMARY

Interlibrary lending has increased greatly in scale and importance, yet access to documents has lagged far behind improvements in bibliographic control. IFLA's programme of Universal Availability of Publications (UAP) is an attempt to correct the balance. This report attempts to present a picture of national interlending systems in as many countries as possible, and on the basis of this information to develop and analyse various models of interlending systems that may be appropriate to countries of different sizes, natures and stages of development.

Few countries can be said to have interlending systems; rather, they have interlending practices that have grown up over the years and been modified from time to time. However, some countries (including the United Kingdom, the United States of America, France and the Federal Republic of Germany) have recently considered a more radical approach. The literature on interlibrary lending is extensive but patchy; for few countries is it possible to build up a clear overall picture of the structure of interlending, or even of the practices and procedures used. Even gross statistics on interlending are hard to come by, and there are very few attempts to assess performance in terms of satisfaction rate, speed of supply and costs. Because of this, no systematic comparison of interlending systems in different countries was possible.

1. ELEMENTS OF A NATIONAL INTERLENDING SYSTEM

Interlending systems consist of several elements:

Collection of documents. Existing holdings of libraries in a country rarely constitute an adequate pool for the supply of documents wanted on interlibrary loan. The pool may be enriched by cooperative acquisition schemes under which items required are dispersed among cooperating libraries; or a central collection or collections may be set up to acquire items specifically for the purposes of interlending. The differences between cooperative and centralized resources are fundamental to the whole question of interlending systems.

As well as machinery for acquisition, machinery is needed also for the retention in the country of documents discarded by libraries, so that unique holdings are not lost to the country.

Means of locating documents. There are 3 main means of locating documents:

a) By union catalogues. These are the commonest, and often the only, way of obtaining access to the holdings of existing libraries. There are many problems associated with them, including difficulty in keeping up to date (with new acquisitions and deletions), inadequate coverage (especially of older publications), difficulty of use (particularly when there is a multiplicity of union catalogues), and cost - to the libraries that submit entries, to the centres that compile and maintain the union catalogues, and to the libraries that use them.

b) By directing requests to specialized libraries. Requests may be directed to specialized libraries, or to more general libraries known to have strong resources in special fields. Formal specialized schemes are likely to be closely connected with national or cooperative acquisition programmes.

c) By directing requests to central collections. Requests may be directed to loan collections attempting more or less comprehensive acquisition of given categories of material. When acquisition is selective, the centre may publish lists of its holdings.

Procedures for requesting and supplying. Requesting and supplying procedures are not greatly affected by, nor do they greatly affect, the total interlending system, except insofar as the existence and use of a single supply source, or a limited number of supply sources, clearly make the imposition of standard forms and procedures much easier, so that requesting can be simplified and speed of supply should be greater.

Communications. Mechanisms for transmitting requests include mail, road transport, telex, telephone, facsimile transmission and computer. For transmitting documents, mail, road transport, and schemes combining the two are the main alternatives. Communication facilities may have a considerable effect on the design of a country's interlending system.

2. THE IMPACT OF TECHNOLOGY ON INTERLENDING

The main technological changes likely to affect interlending are in the form and pattern of publication, and in locating, requesting and supplying documents.

Possible changes in the pattern and form of publication. The main proposals have been publication in microform, publication in summary form (eg synopsis journals), high density storage such as holographs, bubble memories and crystals, and the "electronic journal", in which papers are submitted, refereed and edited on-line, and are also available subsequently on-line. However, the future is uncertain, and meanwhile large volumes of conventionally published material continue to appear. It is concluded that such changes as can be clearly envisaged at present need not be taken into great account in designing interlending systems, but that such effect as they are likely to have may tend to favour central loan collections.

Changes in locating, requesting and supplying documents. The main relevant technological developments are facsimile transmission, television technology, other forms of document transmission (eg satellite), and computer technology. The last seems likely to have the greatest impact on interlending, and could affect the balance between central loan collections and cooperative acquisition programmes.

3. FACTORS RELEVANT TO THE DESIGN OF INTERLENDING SYSTEMS

Several factors, most of them independent of the library system of the country, will affect the design of a national interlending system. These include geography and population, constitution, stage and nature of development, education and research, communications, book production, library resources, and, especially, copyright law, which may have a profound effect on the balance between lending original documents and supplying photocopies and thus affect not only speed of supply and costs but also satisfaction rates.

4. CRITERIA OF A NATIONAL INTERLENDING SYSTEM, AND FACTORS AFFECTING PERFORMANCE

The three main requirements of a national interlending system are:

adequate satisfaction level (proportion of requests satisfied)
adequate speed of supply
lowest costs for achieving adequate satisfaction and adequate speed.

Satisfaction level. Satisfaction levels should be defined as the proportion of interlending requests satisfied, not the proportion available of a hypothetical list of desiderata. The number of requests may be constrained by expectations of the system, but if a minimal satisfaction level is set and attained, expectations and demand will grow to match the performance. It is suggested that, assuming that the national interlending system can satisfy requests with reasonable speed and that the speed of supply is greater than can be attained by obtaining items from other countries, 70% satisfaction within a country is a minimal aim over all requests, although different levels may be set for different categories of material.

The heaviest interlending demand is likely to fall on the following categories of material (not mutually exclusive):

- Journals (about two-thirds of demand)
- Science and technology (two-thirds or three-quarters of all demand)
- Recent publications (50% of demand for monographs is likely to fall on the last 10 years, for journals on the last 5)
- Common material (rather than obscure material)

Studies in the USA, the Federal Republic of Germany and the UK reveal satisfaction rates varying between 60% and 97%, with high failure rates for some categories of material.

The nature of existing interlending demand in a country must be examined before an attempt is made to design or improve an interlending system.

Speed of supply. Only rarely do supply periods of longer than one or two weeks (but less than three or four weeks) seriously inconvenience the user's work. Real urgency therefore applies to a small number of requests, but provision has to be made for such cases. Expectation of speed or delay can however affect confidence in the service and the use made of it. Little information exists on speed of supply in different countries apart from the USA and the UK.

Categories of material can be roughly ranked in order of speed required as follows:

- Scientific and technical serials
- Scientific and technical report literature
- Social science serials

Scientific and technical monographs
Social science monographs and report literature
Humanities serials and monographs.

First-time success, a very important determinant of speed, is affected by the ability to locate a copy, the probability that the item is available, and the willingness of the holding library to lend it. Unless communication systems are very slow, the most serious interlending delays seem to occur not in transmission but in the requesting and supplying libraries: this emphasizes the need for improved procedures.

A reasonable aim for most countries would be a maximum of 3 weeks for the majority of requests, but a capability of achieving supply within one week for requests identified as urgent.

Cost. Costs may be direct or indirect, recurrent or capital; they may also be differently perceived by requesting libraries and in national economic terms. Data on interlibrary lending costs are very scarce, but it is clear that if high satisfaction and speed targets are set, central loan collections are the most cost-effective solution. Lower targets can be attained at less cost by different systems.

5. FEATURES OF EXISTING INTERLENDING PRACTICES

In no country can interlending practices be characterized by one single element, so that even where practices in individual countries can be identified, their relative importance is rarely clear. Subject collections may form important elements in a system, but it is not known what percentage of demand they attract. Similarly, while union catalogues are common, much interlending seems to take place independently of them, but the reasons for this are not known. Current practice can therefore be described only by rough generalizations.

Union catalogues are found in all countries studied, though their number and coverage vary enormously from country to country. In many countries union catalogues are restricted to foreign publications. Union lists of serials are much commoner than of monographs. Some union catalogues, especially of serials, are published, often in microform. Others can be consulted only in a centre.

Direct requesting to libraries known or believed to be holding required items is a common feature; its extent appears to depend on whether there is a central loan collection and whether union catalogues are published or not.

Centralization may take the form of a union catalogue centre through which requests are directed, or the source of supply may be centralized. The British Library Lending Division is the clearest example of a centralized supply resource, but limited examples exist in some other countries.

Regional organization is not uncommon, especially in federal countries; within regions there are varying degrees of centralization. Circulation of requests, among libraries or among union catalogue centres, is practised in several countries.

Subject specialization may be planned as an element in interlending, or exist as a result of cooperative acquisition schemes, or occur by virtue of the existence and nature of particular research institutions. Specialized subject libraries may be approached direct, or built into a hierarchical system.

Hierarchical structure, with requests going through different levels or channels in a prescribed order, appears in some countries, although it may not be deliberately planned as a feature.

As already noted, all countries for which information is available have union catalogues. There is often some coordination, but not always are all even of the most important union lists are always under one control. Most countries have a focus for interlending, but its role varies widely in extent and importance. It is often associated with the national library. In most countries it is not clear where responsibility for the planning, supervision and monitoring of interlending lies, nor indeed whether such a responsibility is recognized.

Such data as exist on the performance of interlending systems suggest that satisfaction rates often do not exceed 70%, and supply times of 3 weeks or more are a norm rather than an exception. Costs are not known, but seem likely to be generally high.

6. MODELS OF NATIONAL INTERLENDING SYSTEMS

The range of potential models is very large, the more so because different models may be appropriate for different forms of material such as monographs and serials, or even for different subjects or different types of library.

Several basic factors are involved:

- Degree of centralization
- National or regional (sub-national)
- Hierarchical nature
- Unity of provision for all libraries
- Unity of provision for all types of literature.

The basic factor used in constructing the models is the degree of centralization, because of its fundamental importance. Four basic models are identified:

Model A. Concentration on a single library. A single collection on which interlending demand is concentrated, may be dedicated solely to interlending, or may share an interlending function with other functions. A dedicated interlending collection would probably have to be built up specifically for the purpose, but it could gather older material from other libraries and also serve as a national repository. A shared library would be one, perhaps a national library, that combined lending to other libraries with a service to its own clients. Resources would not have to be duplicated to the same extent as if a dedicated collection was set up. There is a danger that the two functions may conflict, so that either or both will suffer, but careful planning should minimize this conflict.

Centralized provision may be residual, aiming to hold material that other libraries do not require; or the central collection may aim at very high satisfaction levels from its own stock. For serials, a collection of between 8,000 and 9,000 titles is adequate to satisfy 90% of interlending demand for serials, and between 5,000 and 6,000 titles to satisfy 80%. The contents of core collections may not differ greatly from country to country. The number of monographs required to reach different satisfaction levels is much harder to determine: an intake of c.100,000 a year might be sufficient to satisfy 80% of demand. Dedicated loan collections can achieve great economies of scale and operation. Concentration on a single library is the obvious way of supplying national imprints on interlibrary loan.

The advantages of concentration on a single library are:

It offers a single channel to which most requests can be sent

It can match relation to demand fairly easily

It can provide marginal material fairly easily

The provision of national imprints can be more easily ensured

It can be organized specifically for interlending, or at least for fast retrieval and supply of specific items

Direct costs of handling requests are low

It is economical for libraries to use.

The main disadvantages are:

High costs of setting up and maintaining central collection

High unit costs unless demand is heavy

Possible uncertainty as to future financing

Risk of damage to central collection

Possible danger of a monopoly

Possible unleashing of "unnecessary" demand.

Model B. Concentration on a few libraries. In many countries, a high proportion of titles in a country are contained in a few or very few libraries, on which interlending demand might be concentrated and which could between them satisfy a high proportion of it. With such a system a dedicated collection does not have to be established, but routines in the selected libraries have to be adjusted to enable them to give a remote lending service. If necessary, the resources of the libraries could be enriched to extend availability. For such a system to be effective, the interlending costs incurred by the libraries should be reimbursed, whether from central government funds, from transaction fees, from annual subscriptions by user libraries, or by a combination of these methods. Strong central planning and coordination are essential.

Advantages and disadvantages are similar to, but less than, those for Model A.

Model C. Planned decentralization. The common feature of planned decentralization schemes is that the provision of material is allocated to some extent between libraries on a more or less systematic basis. Strong subject libraries may be set up, and interlending stated as one of their functions. If there are only 3 or 4 such libraries, they will conform to Model B, but in most countries there will be many more.

The advantages of planned decentralization are:

Many or most requests can be sent direct to the specialized libraries

Extensive resources can be developed that will serve local specialists as well as national needs

Additional costs of provision are not high.

Disadvantages include:

The total national costs may be high because of the extensive duplication likely to occur

Conflict may arise between lending and other functions

Procedures have to be adjusted to give an efficient lending service.

An alternative form of planned decentralization is the superimposition of specialization on general libraries, which are expected to acquire additional items within prescribed limits. Cooperative acquisition schemes may allocate the acquisition of documents by subject, language, country of publication, date or authors' names. Superimposed specialization has numerous disadvantages, and it seems that interlending systems based on cooperative acquisition schemes do not have a good record.

Model D. Unplanned decentralization. In most countries, libraries are taken as they are, without any special attempt at specialization, and their resources are made available to other libraries by means of union catalogues. In spite of the apparent economies of unplanned decentralization, there are numerous disadvantages. Neither less common documents nor documents in heavy use can be easily provided. Substantial resources are necessary to construct and maintain the union catalogues on which the whole system depends. The full and continuing cooperation of many libraries is required. The first responsibility of cooperating libraries is to their clients, not to interlending. There is no way of ensuring that provision matches demand. Hidden costs are therefore high, and effectiveness is likely to be low.

Composite models of provision. Since even a high degree of centralization cannot by itself achieve an ideal performance, either for current or (especially) past publications, Models A or B need to be supported by other systems on the lines of Models C or D. Models C or D may support one another. The main combinations are as follows:

Model AC. Single library supported by planned decentralization.

Model AD. Single library supported by unplanned decentralization.

Model ACD. Single library supported by both planned and unplanned decentralization.

Model BC. Few libraries are supported by planned decentralization.

Model BD. A few libraries supported by unplanned decentralization.

Model BCD. A few libraries supported by both planned and unplanned decentralization.

Model CD. Planned decentralization combined with unplanned decentralization.

All of the above combinations assume some form of planning.

Centralization of access. Centralization of access can be achieved only with a national interlending centre to which many or most requests can be directed. Such a centre may be linked to a national loan collection, or it may be a centre responsible for maintaining the main union catalogues of the country. Access may also be partly centralized (as can happen with Model B), or totally decentralized (as usually with Models C and D).

Union catalogues may perform a minor role in support of the central lending collection, or they may be maintained in unpublished form by a centre, or published, or, if automated, consulted on-line. Published union catalogues can be very expensive, although Computer Output Microform from machine-readable files can greatly reduce costs. Costs can be reduced much further still by recording only ISBNs and location codes of libraries. Serials lend themselves more readily to published union lists than monographs.

To avoid proliferation of union catalogues, with the problems this can cause, there should be as few catalogues as possible, and these should be planned as a total system rather than allowed to develop independently.

National or regional (sub-national). Interlending systems can be organized as single national systems, or on a regional basis within a country, with each region having its own more or less independent system. Regional systems may be appropriate in countries with a federal constitution; in very large countries with problems of communication over long distances; in countries where loss rates in transmission are significant; in countries where different languages or cultures exist in different regions; and in countries where the volume of interlending demand is very high and library provision is plentiful. Except where political factors dictate regionalization, it should be avoided because of the inevitable duplication of resources and the problems of organization and coordination.

Hierarchical nature. Hierarchy may be of provision or of access. Hierarchical provision can take several forms, with a national lending collection either at the apex or at the base. Even a comprehensive national collection can be used either as a first resort or a last resort. A rigid hierarchy of access, in which requests have to go through various levels in a prescribed order, can be slow because many requests may not be met at the first level. The best solution may be a recognized hierarchy of access which is not rigidly imposed, so that first levels can be by-passed to gain access to upper levels where higher or greater satisfaction or higher speed is important.

Unity of provision to all libraries. It is not uncommon for public and academic libraries to have separate interlending systems; there may be practical or historical reasons for this, but it seems doubtful if they are sufficient to justify separate systems, since they add complexity, and delay can be caused by the need to switch some requests from one system to another.

Unity for provision for all types of literature. Some forms of literature are easier to provide for on interlibrary loan than others, serials presenting least problems and some forms of non-print document most problems. Central loan collections can aim to cover all material, or can be limited by subject, language, date or form. A central collection that was intended to serve as a first resort for a high proportion of requests but that was restricted in funds or accommodation would undoubtedly need to concentrate first on recent scientific and technological journals published in developed countries.

A system of concentration on a few libraries would quite probably be based on some specialization in the first place, eg one of the libraries involved might be a national science library.

Since it is easy to justify central loan collections for certain types of material - scientific and technological documents, documents in common languages, recent documents, and journals - mixed models AC and AD may be attractive.

7. FACTORS TELLING AGAINST EFFICIENT NATIONAL INTERLENDING SYSTEMS

The requirements that an interlending system has to fulfil if it is to meet a high proportion of requests speedily and economically can be identified by examining the factors associated with (1) failure to satisfy requests, (2) delays and (3) high costs.

Factors associated with failure to satisfy requests

Unavailability of requested item in a country (can be reduced by cooperative acquisition schemes or comprehensive central loan collections)

Inability to locate item (can be reduced by effective and up to date union lists and by well organized subject specialization scheme, and almost eliminated by comprehensive central loan collection).

Item in use or otherwise unavailable at location when requested (can be reduced by more use of photocopies, and further reduced by comprehensive central loan collections with multiple copies where required).

Item not loanable (can be eliminated by comprehensive central loan collections for recent publications, but not for older publications).

Factors associated with delay

At requesting library:

Inefficient internal procedures (a matter for local administration).

Checking of requests (can be done if necessary by a national loan centre).

Selection of possible source of supply (not necessary with comprehensive central loan collection or centres to which all requests are directed).

Use of a variety of forms and procedures to make requests on different sources (can be reduced by cooperative action, or eliminated by comprehensive central loan collection or single loan centre).

In transmission:

Long distance (a real problem only when communications are poor).

Slow communications (can sometimes be reduced by the use of faster methods of sending requests or documents).

At supplying library:

Inefficient internal procedures (can be eliminated by dedicated loan collection, and reduced if all requests go to a single centre).

Need to handle a variety of forms or procedures used by local libraries (can be reduced by cooperative action, and eliminated by comprehensive central loan collection or single loan centre).

Requests with inadequate information (centre with large bibliographical resources can identify some inadequate references).

Failure to supply (can be reduced by comprehensive central loan collection).

Factors associated with high costs

Inefficient internal procedures.

Variety of forms and procedures (can be reduced by cooperative action or eliminated by comprehensive central loan collection).

Checking of inadequate or inaccurate requests.

Selection of possible source of supply.

Need to send requests to several sources.

Need to make more than one application.

Expensive transmission of request (must be weighed against extra speed).

Expensive transmission of document (can be reduced by use of photocopies in place of loans and possibly by alternative systems to the postal service).

Reclaiming and accounting procedures (payment can sometimes be waived, or administrative costs can be minimized by systems using prepaid coupons or deposit accounts).

Union catalogues (can be reduced by reducing the need for union catalogues and by rationalization).

Provision of adequate document resources available for loan or photocopy.

Steps taken to reduce one problem can increase another, but improvements in some aspects are independent of others. The factors also differ in importance from country to country.

Planning at a national level, for example to standardize procedures, to monitor demand and remedy deficiencies, and to achieve better acquisition coverage, would do much to reduce the effect of many of these factors. So, to a lesser extent, would the establishment of a national loan centre, and the improvement (in design, currency and coverage) of union catalogues. Comprehensive central loan collections could achieve the greatest impact, but their cost may rule them out. Greater efficiency in local libraries, both in requesting and supplying documents, and more use of photocopies in place of loans, could be achieved.

8. OTHER ASPECTS OF INTERLENDING SYSTEMS

The relationship of national interlending systems to those of other countries. Efficient systems in neighbouring countries, especially central loan collections, may make it possible to aim at a lower level of national self-sufficiency. However, great caution is desirable before substantial reliance is placed on other countries.

The relationship of national interlending systems to national acquisition programmes. National acquisition programmes and national interlending programmes are closely related and should be planned together. While Model C implies a strong national acquisition programme, Model A can exist independently of, or even render unnecessary, such a programme. Model B can be independent or form an element in a national acquisition programme.

The relationship of national interlending systems to national repository programmes. Interlending systems and national repository systems also need to be considered together, and provision should be made to ensure that material withdrawn from libraries is subsequently available. A Model A collection is a national recipient for such material. Model B, and to a less extent Model C, can also meet this need.

9. MECHANICS AND PROCEDURES OF INTERLENDING

Mechanics and procedures are not considered in detail, since they are affected by local requirements and by the design of the total interlending system, with which the report is primarily concerned and which must be planned before mechanics and procedures can be specified.

Outline procedures for both requesting and supplying libraries are given, to indicate the main elements likely to be present, and to serve as a checklist. The procedures for requesting libraries are considered in 4 main blocks: receipt of requests from user, despatch of requests to supply source, receipt of document, and return of document; and procedures for supplying libraries are considered in 3 main blocks: receipt of requests from requesting library, despatch of document, and return of document.

Attention is drawn to the items of stationery involved at various stages. These items are listed individually; they number 18 in all, but by careful design, by the use of multiple copies and by standard attachments to basic forms, the number of forms and the amount of typing or writing can be kept to a minimum. The basic item of stationery is the interlending request form, to the design and use of which special attention should be paid.

10. CONCLUSIONS

There is a need for considerable improvement, and sometimes radical change, in the interlending systems of many developed countries, and an equal need for developing countries to build into their national library plans, as an integral element, effective interlending systems. Without effective interlending, more and more publications wanted by users will prove unavailable or will not reach them in time. The existing interlending systems of several developed countries are at present showing signs of strain. Interlending must now be regarded as an issue deserving detailed consideration in its own right. Total systems must be planned, in place of the piecemeal development of the past. Not only are satisfaction rates unacceptably low and speeds of supply often poor, but interloan demand is constrained at an artificially low level because of these factors.

Model A - a dedicated centralized collection - has many advantages, but its costs alone may rule it out except in large developed countries with a substantial volume of demand, and even in these some support, in the form of Model C (planned decentralization) or Model D (unplanned decentralization); is needed. However, there may be a strong case for partial collections, such as core collections of serials, which could cater for a significant proportion of demand, thus relieving the burden on other libraries and enabling them to fulfil better the remaining requests. Combined reference/lending collections should be seriously considered, especially for developing countries.

Model B - concentration of demand on a few libraries - is a cheaper alternative to Model A. It may be satisfactory for smaller developed countries, or possibly for some developing countries. Model B is unlikely to be workable unless some way is found of reimbursing costs.

Model C, planned decentralization, is suitable for some large developed countries that already have a sound basis for it in the form of well-established national acquisition programmes and subject specialization schemes. It is not recommended for other countries.

Model D, unplanned decentralization, is by definition not a system that would be planned to give an efficient interlending service. Its only real value is as a support for strong Models A or B.

Union catalogues are essential where access to more than 2 or 3 libraries is required. They need to be carefully planned, designed and coordinated.

Regionalization of interlending systems, although historically understandable, is not generally desirable except in special circumstances.

All types of recorded knowledge need to be provided for, but not necessarily by the same system: for example, a centralized collection may be an effective solution for scientific journals, but not for non-print documents.

Hierarchies, of provision or of access, will exist with mixed models.

A recognized order of requesting seems desirable, but it should not be rigidly imposed on libraries.

Two possible models are suggested that might be appropriate for a developing country:

Model 1 would consist of a central dedicated core collection of 5,000 science and technology titles, specially organized to give a fast service. Humanities and social science serials would be supplied by the national reference library, possibly supported by selected specialist collections. Other materials would be supplied from a combined national reference/loan collection, with adequate duplication of titles in heavy demand. This would be supported by unpublished union catalogues of selected libraries. The national library would serve as the national interlending centre, and a dedicated loan collection of national imprints would be attached to the national reference collection.

Model 2 would have no dedicated loan collection. Instead, provision for science and technology would be concentrated on 3 or 4 specialist libraries in government-funded research centres, planned to provide between them at least 5,000 core serials, all with fully adequate photocopying and other facilities, and with sufficient duplication of documents to serve both local and distant users adequately. They would be backed up by union lists of selected libraries. Humanities and social science documents would be provided from a combined reference/loan collection, supported by unpublished union catalogues of selected libraries. As with Model 1, the national library would serve as a national interlending centre, and a dedicated loan collection of national imprints would be attached to the national reference collection.

Some countries, especially developing countries, face serious obstacles in interlending. These include personal liability on the part of the head librarian, inadequate photocopying equipment, shortage of foreign currency, slow and insecure postal services, and shortage of adequately trained staff. A more general problem is copyright legislation; a solution to the problems this may pose for interlending is urgently needed.

Other aspects of importance are interlending statistics, which should be collected both as a preliminary to planning and for regular monitoring of interlending; the question of payment, which is crucial for Model B and may be important also for other models; and interlending centres, which may have a variety of roles but should certainly be linked with any national library planning centre to ensure adequate control and coordination of interlending.

PART ONE

INTRODUCTION

Interlibrary lending - the supply by one library to another of documents wanted by individuals - is of great and growing importance, both within and between countries. The reasons for this are clear: there has been a great growth in the number and cost of publications, and a comparable growth in education and research and development at all levels has stimulated demand for publications. These factors are common to nearly all countries. To the large output of developed countries has been added the rapidly growing output of developing countries. Demand has been stimulated by improvements in bibliographic access, most significantly in the last few years, when the use of automation has both made the production of new bibliographic tools possible and added a new dimension with direct on-line access to computer-stored references. IFLA's programme of Universal Bibliographic Control (UBC) is coordinating and furthering bibliographic access both nationally and internationally. Users are thus being presented with a larger number and wider range of references, with a speed that has led them to be less content with slow access to the documents to which they refer. At the same time, economic pressures have forced many libraries to cut down on their acquisitions.

In consequence, libraries have become increasingly unable to provide their readers with all the publications they wish to use, and have had to draw more and more on the resources of other libraries. Interlibrary lending, once a marginal activity that was regarded as a favour rather than a right, has become an essential feature of the library scene in every country where libraries have developed beyond a certain level. It is equally essential for developing countries, where development - industrial, agricultural, medical and educational advancement - must depend a great deal on access to knowledge as contained in published documents. IFLA recognized three or four years ago that its UBC programme must be accompanied by a parallel programme of Universal Availability of Publications (UAP), and UBC and UAP are main elements in IFLA's Medium Term Programme. Availability encompasses more than interlending, but interlending is the heart of UAP in the sense that without it major improvements in availability are unattainable.

It is probably fair to say that few countries have fully appreciated the scale or importance of interlending. The scale can be illustrated by the example of the United Kingdom, where the volume of interlibrary loan demand has grown from an estimated 400,000 requests in 1962 to an estimated 3,350,000 in 1977 - an increase of more than eightfold in 15 years. It is true that some of this increase is attributable to the founding and development of the National Lending Library for Science and Technology, and later to the creation of the British Library Lending Division in 1973, so that the 1962 figure may have been artificially constrained by deficiencies in the service (although it was comparable with that of any other country), but the fact that the creation of an adequate service can uncover such a very large volume of demand in fact serves to emphasize the scale of the problem. It is highly probable that in the United Kingdom before 1962, and in many developed countries today, many users are not getting documents that they want to read and that are important to their research or practice. Access to documents has evidently lagged far behind bibliographic access, whereas the two should surely be in balance if serious frustration is not to result. It is probably significant that several developed countries, dissatisfied with interlending systems that have been by no means undeveloped, have recently replanned or are now replanning their systems at a quite fundamental level: the United Kingdom, the United States of America, France and Canada are all examples.

No statistical analysis has to our knowledge been made of interlibrary loan demand in relation to indicators of economic and social development. A close correlation might be expected, since education and research are two functions of development, and they affect the demand for documents. However, beyond a certain level of development one would expect local libraries to be more numerous and adequate, and interlending demand therefore to decline somewhat. In fact, one of the main determinants appears to be the existence of an efficient interlending system; and good local libraries can actually generate new and additional demands. In the United Kingdom it was found that smaller university libraries did not in general make more interlibrary loan demands per researcher than larger ones.[1]

It is desirable here to make a distinction between systems, mechanisms, procedures and practices:

A practice is what libraries actually do.

A procedure we define as a formally recognized practice.

A mechanism is something established specifically to serve a purpose: a union catalogue, or an interlending centre.

A system is a coherent and systematically planned set of mechanisms, procedures and practices. ("A set of elements with relations between the elements such that the set may be looked at as a whole"*).

Most countries do not have systems in the sense defined here; they have mechanisms, procedures and practices which may or may not form a coherent whole. There may for example be various mechanisms such as union catalogues which have developed independently, for the use of which different procedures are recommended, and which in practice are less used than direct approaches to other libraries on the basis of personal knowledge or expectation of their holdings. It is therefore strictly inappropriate in the case of most countries to talk of interlending systems. Nevertheless, we use the term in this loose sense as shorthand for the various mechanisms, procedures and practices in use.

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[1] Line, M.B. and Ede, S J. Interlibrary lending statistics: their collection and use. BLL review (Boston Spa), vol. II, no.2, April 1974, p44-50.

* See note at end of chapter.

It was our hope when we started this study that we would be able to find in the literature adequate descriptions of the interlending systems in use in quite a few countries, and that moreover there would be some indication of the performance of these systems, which would enable us to make a comparative assessment of different types of system. However, although there are many references to interlibrary lending in the literature, we found very few adequate descriptions of interlending systems, and most of these were in Western Europe or Anglo-America. It soon became clear that not only are there in fact few 'systems' in the sense of machinery systematically designed to serve interlending demand, but comprehensive accounts of mechanisms, procedures and practices are rare. Such descriptions as there are tend to concentrate on formal mechanisms and procedures - that is, the union catalogues in existence, the operation of a national centre if one exists, and possibly the recognized machinery for interlending. However, they rarely state whether these mechanisms and procedures are used for the majority of interlibrary loans, or which types of library tend to use them. In some countries, systems appear to cater solely for public or academic libraries - sometimes, as in Sweden, there are separate systems for public and academic libraries - and it is not clear what special libraries do, or even whether the majority of public and academic libraries use the formal system. Even when there is some description of the interlending system, only in very rare cases is any indication given of its performance: what proportion of requests are satisfied, how quickly, and how economically. The existence of an interlending structure, however impressive, is no guarantee of its effectiveness or efficiency, and there seem to be examples of quite elaborate mechanisms which are bypassed much of the time in practice because of their unsatisfactory performance. The nature of any formal system, and what libraries actually do, may be completely different.

This extreme paucity of published information on how libraries in different countries actually practise interlending, and how well they fare, has constituted a major and fundamental barrier in our attempt to fulfil the specific terms of our contract. Without this information, it is obviously difficult to comment with much confidence on the relative effectiveness of different types of system.

One way of supplementing published information would have been to correspond with selected countries to obtain a fuller and clearer picture. This was not possible for several reasons. In the first place, it would not have been reasonable to conduct such a correspondence until a literature search had been conducted; but by the time the search had been completed, there was insufficient time to collect further data in this way, although the draft descriptions were sent to individual countries for comment and several were revised or brought up to date in consequence. Secondly, it would be difficult in many countries to identify persons who could provide authoritative information on the interlending system in use; and it is almost certain that they could not have provided any data on its performance, for the simple reason that few countries have studied their interlending performance. Information on the performance of interlending systems appears in fact hardly to exist in most countries, exceptions being the USA, the Federal Republic of Germany, and the United Kingdom.

A more satisfactory method of collecting information would have been to visit selected countries. However, this would have been very expensive and time-consuming, and, while a reasonable picture of interlending systems and practices might have been built up, it would still not have been possible to obtain information on performance unless special studies could have been conducted in each country.

This study is therefore less comprehensive and detailed than we would have wished. We have collected what information we could on the interlending systems of as many countries as possible, not confining ourselves to the principal systems only. If we have drawn heavily on the experience of the British Library Lending Division and its predecessors, it is because it is well documented rather than because of our personal knowledge. If similar information had been available on interlending in other countries, we would have used it. We have identified various main types or models, though we have rarely been able to link with these models actual examples of interlending systems, because clear examples could not usually be found. Finally, we have, on the basis of what is known about the operation of interlending systems, suggested which models seem likely to be particularly applicable to countries of different types, sizes and stages of development, and tentatively identified two models that may be especially appropriate for developing countries.

We make in this report some assumptions that should be stated at the outset. The first is that just as most individual libraries aim to serve all their readers, without making value judgments as to their expressed needs, so the aim of interlibrary lending is to supplement this provision in whatever way is required. While most interlibrary loan demands may, at least in developed countries, be for the purpose of research or serious study, if only because most recreational needs are not for specific documents and can be satisfied from a range of locally available material, interlibrary lending is for all who need it. In any case, there is often in practice great difficulty in distinguishing 'serious' and other needs, and literature of all levels can form the subject of research.

We assume also that interlibrary lending aims to supplement local provision, not replace it. The library system of any country must be constructed on a firm basis of adequate local provision, however efficient its interlending system may be.

Another assumption is that interlending needs to be, and can be, planned. There is sufficient evidence to demonstrate serious flaws in unplanned interlending, and we regard any national library plan as seriously incomplete unless interlending is an integral element in it. Nevertheless, some recent national library plans, and writings on national library planning, pay little or no attention to interlending; the need and right of all individuals to gain access to published documents they require may be accepted, but the means by which this can be achieved is not considered.

We do not consider in this report the informal cooperation that will always exist at local level between neighbouring libraries. This may take the form of transferring books between libraries or of suggesting to readers that they try neighbouring libraries. The first is indeed interlending, and may be substantial in volume, but it plays only a minimal part in any national system, and cannot easily be included in the design of such a system.

We are concerned only with published material, including 'semi-published' documents such as report literature, but not manuscripts. We use the term 'document' or 'publication' to refer to all such forms of recorded knowledge whether they are in conventional printed form, in microform, or audio-visual products such as a sound tape or a film.

The structure of the report, in which interlending is approached from various angles, leads to the appearance of some points several times in different chapters. Rather than elimination of such repetition, reiteration of significant points in different contexts seemed positively desirable.

Five terms used in the report should be defined here:

Interlibrary lending (interlending for short):

"a cooperative arrangement among libraries by which one library may borrow material from another"* It is held here to include the loan of originals or the supply of copies (in hard copy or microform) in place of the original.

Monograph: a conventional 'book', as opposed to a serial, a report, an official publication, or a 'non-print document'.

Serial: "a publication issued in separate and successive parts, usually in a uniform format with constant title and intended to be continued indefinitely"*.

Report literature: "documents containing the findings of an investigation or study by an individual or group"*. Not published commercially, but made available through institutions or special agencies. They may be produced in a number of copies or be made available on demand.

Non-print document: any form of recorded knowledge other than printed (or manuscript) documents, whether in hard copy or in microform; includes sound recordings, films, etc.

N.B. The definitions marked * are taken from Wersig, G and Neveling, U. Terminology of documentation. Paris, Unesco, 1976. Their definition of "monograph" does not distinguish it from some report literature or non-print documents, and is not therefore adopted here.

1. ELEMENTS OF A NATIONAL INTERLENDING SYSTEM

The matters dealt with here are nearly all considered in greater depth in later chapters. This chapter is intended merely to specify the essential elements of interlending systems in order to aid and clarify subsequent discussion.

Interlending systems consist of several elements:

1. Collection of documents
2. Means of locating documents
3. Procedures for requesting documents
4. Procedures for supplying documents
5. Communications.

1.1 Collection of documents

It is obvious that documents cannot be lent unless they are available. For an effective national lending system, the proportion of documents required that must be available is substantial. In developed countries, the assumption may be made, and often is (sometimes wrongly), that the existing holdings of libraries constitute an adequate pool for the supply of documents required on interlibrary loan. In developing countries, where collections are much poorer, it may be necessary on the one hand to make the fullest use of the documents that are available, but on the other hand they may in total amount to only a small proportion of what may be required on interlibrary loan.

Some means of enriching the pool of documents already acquired by libraries for their own purposes must therefore often be sought.
In developed countries, many attempts have been made to achieve this by cooperation between libraries, whether on a national or regional basis;

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national schemes are sometimes comprehensive, sometimes organized by subject or language group. In some cases, these schemes have been funded by a reduction in duplication between the cooperating libraries, but in most cases extra financial resources have been needed to buy the additional publications. One difficulty on which several schemes have foundered is that in times of economic pressure, when cooperation is most needed, cooperating libraries are least able to find extra resources to acquire materials that their own clients are unlikely to need. Additional funds from government or other sources may be sought, but in this case it may prove more satisfactory to place the publications so required in a single centre rather than distribute them among a group of cooperating libraries.

A radical alternative to cooperative acquisition schemes under which items acquired are dispersed among cooperating libraries is a central collection or collections which can acquire items specially for the purposes of interlending. Such a central collection may be funded by the cooperation of a number of libraries, like the US Center for Research Libraries in Chicago, or it may be directly funded by the Government, as in the case of the British Library Lending Division. The differences between cooperative and centralized resources, and the arguments for and against each, are fundamental to the whole question of interlending systems.

One major question to be decided concerns the sort of material that should be provided for interlending. Cooperative acquisition schemes have generally concentrated on the less common materials that libraries do not normally buy for the use of their own clients, and that would not therefore be available unless they were specially acquired. However, studies in more than one country have shown that the heaviest demand falls not on the least common items, but on items that are held by many libraries but that cannot be easily or quickly supplied by them because they are in use in those libraries. A system designed to satisfy peripheral demand may therefore fail to satisfy adequately the main bulk of demand.

Another major question concerns the retention of documents that have been acquired by libraries in the country. Most libraries at one time or another discard less used materials, among which may well be items that have been acquired in the past under cooperative schemes. Libraries faced with pressures on their space may have to face a hard decision whether to retain such items or to dispose of them. Unless there is some special machinery for retention or disposal to an appropriate centre or centres, such items may be lost to the country in future. That this has happened in the past is clear from the inability of some countries to supply their own publications on interlibrary loan - publications that may once have been commonly held in libraries, but that have evidently been discarded by one library after another. There may indeed be archival copies in national reference libraries, but these may be unique and not loanable.

National lending systems are therefore intimately bound up with national acquisition policies and national disposal and repository policies.

1.2 Means of locating documents

The three main means of locating documents are:

a. by union catalogues;

b. by directing requests to libraries specializing in the relevant field;

c. by directing requests to central collections.

These means may be used separately or, more usually, in combination.

a. Union catalogues. These are catalogues consisting of the holdings, complete or partial, of a number of libraries in the country. Libraries are expected to report, currently and possibly retrospectively, to a centre which maintains the union catalogue. This centre may be national, regional or local; it may be permanent, or it may be ad hoc for the purposes of a particular catalogue; it may be independent, or attached to another organization. Union catalogues may be comprehensive, or may be limited in various ways:

by form of material (the commonest division is into serials and monographs);

by subject (eg. medicine, law, etc);

by locality (region or conurbation);

by type of library (eg. academic or public);

by language (eg. books in oriental languages);

by country or region of publication (eg. Latin American publications);

by date (eg. pre-1700 publications).

These characteristics may be combined, for example medical serials, or monographs in a given conurbation. Union catalogues may be unpublished, in which case requests have to be directed to the centre holding the union catalogue in question; or they may be published, whether in hard copy or microform, in which case libraries can send requests direct to identified locations; or, if they are maintained by computer, they may be accessible on-line, with the same effect as for published union catalogues except that on-line catalogues are likely to be more up to date. Among the problems associated with union catalogues are:

difficulty in keeping up to date (with new acquisitions and with deletions);

inadequate coverage, especially of all the publications acquired before union catalogues were started;

difficulty of use, particularly when there is a multiplicity of union catalogue;

cost, both to the cooperating libraries in submitting entries and to the centres in compiling and maintaining the union catalogues. Nevertheless, union catalogues are the commonest, and often the only, way of obtaining access to the holdings of existing libraries.

b. Directing requests to specialized libraries. Requests may be directed to specialized libraries, or more general libraries known to have strong resources in special fields, in a more or less formal or informal manner. In a formal system, specialist libraries may be identified as the main national resource collections in their fields, as in the Federal Republic of Germany; or, as in some of the regional schemes in the United Kingdom, libraries may attempt complete coverage of certain categories of publication by dividing the field of knowledge between them, on an arbitrary basis rather than in relation to local specialist demand. In an unplanned system, there will still be libraries that are highly specialized or are known to be strong in a particular field, and requests may be directed to these with a fair expectation of success. Formal specialized schemes are likely to be closely connected with national or cooperative acquisition programmes.

c. Directing requests to central collections. Requests may be directed to loan collections attempting more or less comprehensive acquisition of given categories of material. This is the case with the British Library Lending Division, to which libraries may send any requests for serials or report literature, or for recent English language monographs, with a high probability of success. Alternatively, the centre may publish lists of its holdings, as does the Center for Research Libraries in the USA.

1.3 Procedures for requesting

At the simplest, one library may request items from another simply by writing a letter, but in almost all cases special interlibrary request forms are used. There may also be recognized procedures that are followed. Requesting procedures, though an essential element in an interlending system, are not greatly affected by, nor do they greatly affect, the total interlending system, except insofar as the use of a single supply source, or a limited number of supply sources, clearly makes the imposition of standard request forms and procedures much easier, and also simplifies matters for requesting libraries in that they can direct all or most of their requests to one or very few centres. Interlending mechanisms are dealt with more fully in chapter 9.

1.4 Procedures for supplying

As with requesting procedures, supplying procedures can be simplified and standardized if only one supply centre or a limited number of supply centres is involved. However, since speed of supply is affected to a considerable extent by the procedures used by the supplying library, they are more closely related to the general design of the interlending system. Since it is desirable for a variety of reasons to satisfy as many requests as possible by photocopies, adequate photocopying machinery is essential for any supplying library. The basic machinery required is for making direct hard copy; additional desirable equipment includes machinery for making microform from hard copy, for making hard copy from microform, and, less essential, for making microform copy of microform.

1.5 Communications

There must obviously be effective means of transmitting requests and of transmitting documents. Mechanisms for transmitting requests

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include mail, road transport, telex, telephone, facsimile transmission and computer. When distances are small, for example within cities, requests may be delivered personally, using local transport. Use of the telephone is unsatisfactory in most cases because of the difficulty of ensuring correct transcription of complex requests, the time required to transcribe them, and the absence of a form that can be used by the supplying library. Computer and facsimile transmission both require compatible machinery in requesting and supplying libraries, and of course electronic links between the machines. These prerequisites at present exist only in a relatively small number of libraries. Both computer and facsimile transmission, especially the former as more libraries are equipped with computer facilities and linked to networks, show much promise for the future; it has been suggested that access to the proposed National Periodicals Center in the USA should be by computer only, and links with data bases, whereby computer searches can be followed immediately by document requests, are likely to favour the use of computers for requesting. Nevertheless mail and telex are likely to continue to be the main methods in the immediate future in most countries.

For transmitting documents, mail, road transport, and schemes combining the two are the main alternatives. The relative costs and speeds will vary according to local circumstances. Relatively small distances may favour road transport schemes, as in the United Kingdom, where experimental non-postal schemes in certain areas have proved both cheaper than mail and more reliable in speed of supply, and it is planned to extend such schemes over the whole country. Experiments with facsimile transmission, most of them in the USA, have so far shown it to be grossly uneconomic, and even though costs may fall somewhat they are unlikely to fall to a level where facsimile transmission becomes viable for more than a relatively few very urgent requests.

One main reason for preferring use of photocopies for retention rather than loans of original documents is that they are much cheaper to send and do not need to be returned. The communication facilities in each country are clearly likely to have a considerable effect on the design of the interlending system, but this effect should not be exaggerated: as will be seen, studies in developed countries have shown that most delays occur not in transmission but in the requesting and supplying libraries. A more serious problem than speed in some countries is reliability of delivery: a high probability that documents will be delivered is clearly essential.

2. THE IMPACT OF TECHNOLOGY ON INTERLENDING

This is a time of rapid technological change. Some of this will undoubtedly affect interlending and should therefore be taken into account in the design of national lending systems. It must however be borne in mind that, while the potential implications for the future may be large, there may be a considerable period before much effect is felt, and in the intervening period improvement is urgently necessary if interlending demand is to be adequately met. Not only may developments be slower than has sometimes been predicted, but their economic implementation may prove difficult and will certainly take time. Moreover, there is a vast quantity of documents in the world's libraries in conventional form, to which conventional access is provided. Even if technology has a radical influence on the system of the future, the great body of knowledge enshrined in past publications has still to be made available. It may be significant that the USA, one of the most technologically advanced countries in the world, has recently decided to set up a National Periodicals Center to provide access to ordinary journals, although its design will presumably allow it also to take advantage of technological developments.

This chapter merely indicates where the main impact of technology may occur. No attempt is made to elaborate on the technological and economic issues involved, or to consider possible future interlending systems based on the possible technology of the future: there are too many unknown factors in the situation, and the possible permutations of technological advances on various fronts are too numerous, for such consideration to be very fruitful at present for the purpose of this study. It could however be worthwhile to carry out, as a separate study, a review of alternative futures for the supply of documents.

The major technological changes likely to affect interlending are in the form and pattern of publication, and in locating, requesting and supplying documents.

2.1 Possible changes in the pattern and form of publication

Major changes in the nature and form of publication have been prophesied for many years. In particular, it has been forecast for several decades that many more documents will be published in microform. Although to date few major changes have been apparent, economic circumstances, combined with a continued growth in the reporting of research and the writing of other documents, have led to much more intensive study of the whole question. The main proposals have been:

a. Publication in microform.
b. Publication in summary form, eg. in synopsis journals, with full text supplied on demand, whether in microform or hard copy.
c. High-density storage such as holographs, bubble memories and crystals, whether reproduced in copies that libraries can acquire or accessible remotely from a centre or centres.
d. The 'electronic journal', in which papers are submitted, refereed and edited on-line, and are also available subsequently on-line.

Microform publication is now well established, though it is not used for more than a minority of publications, most of them research reports and other documents likely to be in low demand. Until now it has supplemented rather than substituted for conventional publication. Its existence and growth are unlikely to affect interlending systems significantly, precisely because the material in question is not likely to be in heavy demand. It is possible for libraries to build up large collections in microform, and many libraries did so in the 1960s, but more recently the acquisition of large quantities of material that is very rarely wanted has been questioned;

it is not usually cheap to acquire, and it may be much more economic to obtain particular items as required by readers from publishers (or re-publishers) or from central collections, which can provide copies and so preserve file integrity. Paradoxically, therefore, a cheap publication medium may argue rather for central collections than for local acquisition on a large scale.

On-demand production of single copies (of articles, reports or even monographs) from master copies already exists in a limited way, and is currently the subject of several experiments. It is often linked with 'synopsis journals' - journals published in the ordinary way but containing only synopses of the articles, the full text of which has to be specially requested. This solution is attractive as helping to solve the economic problems of learned journal publishers while still making the material fully available to anyone who wants it. It has yet to become fully acceptable to authors, or for that matter to users, but it may prove a better alternative in the long term than microform publication of low-demand material on a large scale, if only because of the resistance of many users to microform. The growth of on-demand publication argues strongly for a central supply source which holds the originals and can make copies available on demand. Since the publishers clearly have some interest in the supply of this material, they may wish to set up their own supply centres, separate from central loan collections. Such a solution seems likely to be uneconomic for publishers and to cause difficulties for libraries and their users, and it would appear preferable to seek an accommodation with publishers whereby any central loan collection acts in effect as an agent for the publishers in return for appropriate payment.

High-density storage, while technically feasible, is still at an experimental stage, and it is difficult to say much about it until economic as well as technical feasibility has been demonstrated.

The 'electronic journal' has been strongly advocated by Professor John Senders and others[1], who have confidently put it forward as the form of the future, superseding much or most conventional journal publication. Quite apart from the economic problems still to be overcome, objections to such a form of 'publication' seem likely to be no less than the objections to microform, and for similar reasons. Among the likely disadvantages are the need to be close to a computer terminal or to read computer print-out, much greater difficulty in scanning a text in the way that a conventional document can be scanned, and the physical unattractiveness of the medium compared with ordinary printed material. The adoption of the 'electronic journal' would clearly have a radical effect on the whole nature of library use, including interlibrary lending, but it seems unlikely that it could ever supersede publication of journals of high status with large circulations, and it has not to our knowledge been suggested that it should supersede monographs.

There is no doubt that various alternatives to the conventional printed page will continue to be explored, and that some at least will prove viable for certain kinds of material. However, it seems doubtful if, from the viewpoint both of economics and of acceptability, conventional publication will be superseded for material for which there is a substantial market. Conventional publication is a highly effective and economic way of making available multiple copies of monographs and journals. If the market is adequate to support conventional publication, there seems no good reason for abandoning such a well-tried form. Wholesale drastic solutions such as are sometimes proposed are most unlikely to be generally applicable. Little attempt has evidently been made at a systematic analysis of various kinds of material, their nature, readership and market, and the ways in which each can best be made available economically and acceptably.

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[1] Senders, J.W. & others. Scientific publication systems: an analysis of past, present, and future methods of scientific communication. University of Toronto, Dept. of Industrial Engineering, 1975.

Our conclusion is that such changes in the pattern of publication as can be clearly envisaged at present need not be taken into great account in designing interlending systems, but that such effects as they are likely to have may tend to favour central loan collections.

2.2 Changes in locating, requesting and supplying documents

The main technological developments relevant to locating and/or requesting documents are:

a. Facsimile transmission
b. Television technology
c. Other forms of document transmission (eg. satellite)
d. Computer technology.

a. Facsimile transmission

There have been several experiments, mainly in the USA, in the use of facsimile transmission to transmit the text of documents between libraries. All of these have foundered on cost - not merely the rental of the machine and the costs of transmission, but the cost in labour. Even though the newest machines are much faster than previous models, and can transmit two pages a minute, the quality of reproduction at this speed is poor*, and even if it were adequate the method is still far too slow and costly for all but a small minority of urgent requests. A more promising use of facsimile transmission is for the transmission of requests. Accurate transmission can be ensured, and no additional typing or writing costs are incurred. Whether or not this is cheaper than the use of telex depends on a number of factors, such as the cost of labour and the machinery available in each country. Computer transmission seems more likely to suceed telex as a means of fast transmission.

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* Good quality can be obtained on some machines at a speed of two minutes a page.

b. Television technology

Recent developments in television technology, such as the Prestel (perhaps better known by its earlier name of Viewdata) system being developed by the British Post Office, may aid access to the holdings of libraries. It seems most unlikely that union catalogues could be held in this form, which is not suitable for the display of very large files of detailed records because of the cost of storage and the small size of the television screen. However, directories of specialist collections could well be made available in this way, and the ease of use and wide availability of equipment may make this an attractive subsidiary aid to interlending.

c. Other forms of document transmission

Satellites have been used to transmit information over long distances, but at great expense where the information exceeds a few pages. Their use within countries seems very unlikely to be justifiable in economic or in any other terms. The same seems likely to apply to other forms of long-range transmission.

d. Computer technology

The greatest impact on interlending is likely to be that of computer technology. It can, as we have seen, affect the form in which documents are held. It can also be used to construct and maintain union catalogues, and to publish them, in hard copy or more usually on Computer Output Microform (COM). Computer-held union catalogues can also be accessed on-line, and this facility may also aid cooperative acquisition policies, thus affecting document provision. The bibliographic checking of requests against authoritative files is possible (it is, for example, being used currently at the British Library Lending Division). Finally, requests for documents can be made on-line.

Several experiments have already been conducted into use of the computer for these purposes, and there are several operational systems that use computer technology.

Whether the use of computers will significantly affect the balance between central loan collections and cooperative acquisition programmes depends on several factors. First, appropriate computer systems must be developed; this is easier to achieve in developed than in developing countries. Secondly, effective on-line systems require that at least the majority of the main user libraries have appropriate terminal facilities. Thirdly, even in developed countries, computer systems can provide access to only a limited proportion of the documents required unless existing union catalogues are automated or cooperating libraries submit entries in machine-readable form for existing holdings; catalogue conversion on this scale is a huge operation. Fourthly, and most critically, fast access to locations, and the speed of requesting offered by on-line request systems, do not in themselves make the documents available; libraries are often unable or unwilling to supply many of the documents for which they are requested on interlibrary loan, because they are in use locally. This disadvantage could be reduced, but probably not removed, by on-line requesting and response systems, so that immediate negative response from one library could be quickly followed by a request to another library, thus reducing the delays inherent in multiple requesting.

3. FACTORS RELEVANT TO THE DESIGN OF INTERLENDING SYSTEMS

There are numerous factors, most of them independent of the library system of the country, that will affect the design of a national interlending system.

3.1 Geography and population

The physical size of the country is less important than its communication system and the distribution of its population. A very large country whose population is concentrated in a few urban centres creates far fewer problems for library service than a country of a similar or smaller size whose population is widely scattered in small towns: fewer libraries are needed in the former case, and the communication system required can be relatively simple. Nor is the size of population itself of prime importance - the volume of demand depends much more on other factors such as education and industrialization.

The geographical situation of a country is relevant insofar as cooperation with, dependence on, or supply to neighbouring countries is feasible. This obviously depends on the characteristics of neighbouring countries. Cooperation is likely to be more feasible if there is some similarity in library requirements - if, for example, books in similar languages or on similar subjects are required, as may be the case with Spanish-speaking countries in Latin America at a similar stage in industrial and agricultural development. Cooperation will also depend for its value on the quality of library provision in neighbouring countries, as well as on communications between the countries - and whether these are significantly better than with other, more distant countries whose library provision may be better.

3.2 Constitution

A country with a federal constitution that gives a high degree of autonomy to states or provinces may find centralization less feasible and acceptable than one with a non-federal constitution, even if, as seems likely, the economics of the argument are not affected.

3.3 Stage and nature of development

Not only will the volume of demand per head of population normally be far greater in developed than in developing countries, but the nature of demand is likely to be significantly different, with a much greater emphasis on agriculture and medicine in most developing countries, and a higher level of demand for pure science and very recent publications in developed countries. The degree and nature of industrialization will also affect the nature of interlibrary loan demand. Even between developed countries of a roughly similar nature, interlibrary loan demand can differ significantly: for example, journals account for only 50% of demand from US academic libraries, compared with 64% from British academic libraries.

Not only the level of industrialization, but the distribution of industry in the country may affect the design of an interlending system. Industry that is heavily concentrated on a few areas can be more easily served than widely distributed industries.

3.4 Education and research

These are partly but not wholly functions of economic growth. Higher priority may be given to education, especially higher education, in some countries than others, and the level of postgraduate research is likely to differ widely, even among developed countries. In developing countries, the proportion of research devoted to applied science, technology and economics is likely to be greater than in developed countries.

The level of education in the adult population will also affect interlending demand. In developing countries, there may be a substantial demand that cannot be satisfied in local libraries for literature of an intermediate level, for self-educational or even recreational purposes. Indeed, one would expect the average level of literature requested on interlibrary loan in developing countries to be rather 'lower' than in developed countries, but one would also expect this to be a temporary phenomenon; as local libraries improve and the level of education becomes higher, the level of literature requested is likely to become gradually 'higher'.

3.5 Communications

In most countries, mail will be used for the great majority of requests and loans. The speed of the mail service will depend in turn on air, rail and road transport. In countries of a large geographical size. air transport is necessary if long delays are not to occur.

For the transmission of requests, telex and, where possible, computer links can provide faster transmission than mail. As for the transmission of documents, where mail is used over long distances, items should be sent by airmail rather than surface mail.

Although an adequate system of communications is of course essential if interlending is to take place at all, within certain limits speed of transmission may not be critical: as noted elsewhere in this report, studies in several developed countries have shown that the most serious delays occur not in transmission but in requesting and supplying libraries. Nevertheless, all delays should be cut to a minimum, including delays in transmission.

3.6 Book production

Some countries publish far more than others, and the disparity in the production of research literature, especially in science, is even greater. Research literature production is heavily concentrated on a few countries, most notably the USA and USSR. This may be a temporary phenomenon - in particular, social science literature in some developing countries is growing very rapidly - but it is striking that the concentration has changed little in the last 20 or 30 years. Users in the more productive countries are clearly likely to find more of the literature they require in their local libraries, or available elsewhere in the country, than users in countries that produce little. It is also easier for such countries to ensure adequate provision of at least a fair portion of literature required on interlibrary loan. Similar considerations apply, to a lesser extent, to the provision of literature in the main language of the country; about half of all learned journals are in the English language, and Australia, say, is therefore in a better position to make adequate provision than, say, Indonesia.

3.7 Library resources

The strength of existing library resources, and the money available for developing new resources, are clearly two critical factors, which depend in the first case largely on history and in the second on economic development. While a developed country may be prepared to make available substantial additional resources to have a fast interlending service, if necessary duplicating the resources of other libraries, in developing countries the emphasis may have to be on maximizing the use of existing libraries. However, if all factors are taken into account, cooperative systems of this kind are not necessarily more economic than collections developed specially for interlending, or alternatively than the deliberate development of an existing library to serve the purpose of interlending as well as its present function.

3.8 Copyright law

Copyright legislation is far too complex an issue to be dealt with in this report. However, its impact on interlending can be profound. Journal articles constitute the majority of requests in most countries. The supply of photocopies for retention is usually much cheaper and more satisfactory than the loan of original documents in the case of articles in journals or conference proceedings and of report literature in microform: cheaper in running costs because transmission costs are less and because the copies do not have to be returned, more satisfactory because the user can retain the item. Most important of all, the supplying library retains the original documents, which can still be used to serve its own clients and satisfy other interlibrary loan requests; indeed, whether many items can be supplied at all may depend on whether they can be photocopied. This factor may affect the whole design of a national lending system.

Copyright legislation could inhibit the supply of photocopies in two main ways. Permission from copyright owners may be required before copies are made, and this can be such a lengthy procedure that it may rule out photocopying as a regular practice. Secondly, payment of royalties to publishers (or even perhaps authors) may be necessary, and this may cancel out much if not all of the cost advantage over loans of the original. The other advantages, however, for the design of a national lending system, notably the difficulty and capital cost of ensuring in any other way an adequate and fast supply of journal articles, seem likely to make it preferable to alternative systems based on loans.

4. CRITERIA OF A NATIONAL INTERLENDING SYSTEM, AND FACTORS AFFECTING PERFORMANCE

The three main requirements of a national interlending system are:

1. Adequate satisfaction level (proportion of requests satisfied)
2. Adequate speed of supply
3. Lowest cost for achieving adequate satisfaction and adequate speed.

4.1 Satisfaction level

There are several considerations that have to be borne in mind when determining the satisfaction level at which interlending systems should aim. In the first place, satisfaction levels should be defined as the proportion of interlending requests satisfied, not the proportion available of some hypothetical list of desiderata. This question is parallel to that of assessing the adequacy of a local library. There are two main ways of doing this: by checking the library's holdings against a list of items that the library might reasonably be expected to have, and by checking the availability of items actually required by users. There are deficiencies in both methods. Comparison with a checklist depends greatly on the quality of the checklist; and even the best may contain many items that, however 'significant' they may be, may not actually be wanted by any of the library's users. It is difficult to think what kind of checklist might be used to assess the quality of a country's interlending provision, and this method must be ruled out if only for practical reasons.

The problem with the second method is that the demands actually placed on a system are likely to be affected by the quality of the system. In a local library, for example, a reader may not ask for items he does not expect to be available, and if the library stock is poor he may miss a number of references relevant to his work, since most references are known to be obtained from other publications, and he may therefore never ask for relevant items. Expectation of success (or of speed of supply) can affect both the actual volume of demand and the nature of demand: the less adequate the system is, or is believed to be, the lower the percentage of 'difficult' requests that are likely to be placed on it.

Nevertheless, if a certain satisfaction level is set as an aim, and the present performance compared with it, deficiencies will be revealed for some categories of material at least, and if improvements are then made in the system, expectations will increase. This increase in expectation and the consequent increase in demand may lower the satisfaction level again, so that further action may be required. The better a system becomes, the more requests it will attract, until saturation point is reached.

It follows from these considerations that, if a low satisfaction level is set as an aim, improvements in the system may not be believed to be necessary, and a large amount of demand may remain latent. On the other hand, if the satisfaction level is set at a very high figure, it is possible that it will never be reached, because outstanding performance will generate very high expectations, not all of which can be met. It is suggested that, assuming that the national lending system can satisfy requests with reasonable speed (see below), and that the speed of supply is greater than can be attained by obtaining items from other countries, 70% satisfaction is a minimal aim within a country. Below this level, would-be users are likely to experience frustration, or restrict demands because of low expectation, or both. For national imprints - the publications of the country itself - 100% satisfaction should be aimed at, because the country of origin is the obvious and often the only source of most publications.

In deciding whether to supply items from within a country or from abroad, other considerations as well as speed have to be taken into account. Apart from political considerations, which may in themselves be decisive, the most important factors are economic. In most countries, obtaining items from abroad is likely to be considerably more expensive than obtaining them from within the country, if only because of higher postal charges. Any item wanted, or likely to be wanted, more than two or three times within a country is probably cheaper to acquire if copies are not already held than to obtain from abroad on loan. It seems likely that, as suggested above, levels of national self-sufficiency below 70% are unlikely to be economic, though detailed and complex economic studies in individual countries would be needed to establish this.

The satisfaction level will depend not only on the existence of wanted items in a country, but on the ability to locate them, and then on the ability of libraries to supply them. The highest percentage of failures is likely to occur with items at the extremes of demand - those in very high demand and those in very low demand. The reason why the latter may be unavailable is obvious: they may not be held by any library in the country. High demand items are likely to be unavailable because, although held by many libraries, they may well be in use at the time, or libraries may be reluctant to lend them because there is a good chance that local users will want to consult them. As pointed out below, the heaviest interloan demand falls not on obscure items but on common ones. For example, an analysis conducted at the British Library Lending Division showed that the three most heavily requested journals were Science, Biochimica et Biophysica Acta and Nature - all high status journals, held in many British libraries.[1] The rank list of journals in order of demand bore a similarity to the rank list of journals in order of size of circulation, and of status as assessed by citations received.[2] The main reason why commonly held material receives heavy interlending demand is that while it may well be in most large or medium-sized libraries, most libraries are small and do not hold it. Also, a requesting library's copy may be at binding when required, or may be disposed of after a year or two to save binding costs and space.

If the experience of the British Library Lending Division[3] - which, it should be remembered, receives over 17% of its demand from other countries - is any guide, it appears that the heaviest interlending demand is likely to fall on the following categories of material (not mutually exclusive):

Journals (about two thirds of demand)

Science and technology (two thirds or threequarters of all demand)

Recent publications (50% of demand or more for monographs is likely to fall on those published in the last 10 years, and for journals on the last 5 years).

Common material (rather than obscure material).

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[1] Line, M.B. and Wood, D.N. The effect of a large-scale photocopying service on journal sales. Journal of documentation (London), vol.XXXI, no. 4, December 1975, p.234-245.

[2] Scales, Pauline A. Citation analyses as indicators of the use of serials. Journal of documentation (London), vol. XXXII, no. 1, March 1976, p.17-25.

[3] Wootton, C.B. and Ede, S.J. The BLLD success rate study 1976. BLL review (Boston Spa), vol. V, no.2, April 1976, p.53-66.

The implications of these considerations for the design of interlending systems are, as we shall see, profound. In brief, they mean that a system solely devoted to scientific and technical journals published from a given date can hope to satisfy a very significant proportion of all demand within a few years, even if it does not attempt to go beyond a few thousand core journals.

As was noted in the Introduction, very little information on the performance of systems could be found, and so it is impossible to say what the satisfaction level of the interlending systems in most countries actually is. There is however some evidence from three countries, all of which have paid considerable attention to the design and performance of interlending systems, and which might therefore be expected to have better performances than most. These are the USA, the Federal Republic of Germany and the United Kingdom.

Although there is a wealth of data on interlending in the USA, studies have been restricted to particular types of library or categories of documents. A study of the interlending activity of academic libraries[4] in 1971 revealed that some 71% of requests for all types of document could be satisfied; interestingly, the highest success rate was for German-language documents, followed by French, with English-language material in third place. A later study[5] of the availability of periodical literature gave a success rate of 79% and a study confined to primary scientific and technical periodicals and conference proceedings[6] showed a satisfaction level of 84.2%. The commonest cause of failure was that libraries did not own documents for which they were requested.

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[4] Palmour, Vernon et al. A study of the characteristics, costs and magnitude of interlibrary loans in academic libraries. Westport, Conn., Greenwood, 1972. x, 127p.

[5] Palmour, Vernon et al. Access to periodical resources in a national plan. Washington,DC, Association of Research Libraries, 1974. ix, 171, A 1-48 p.

A recent study conducted in the Federal Republic of Germany[7] of requests for post-1945 German language monographs demonstrated that the percentage *for which locations could be provided* by the individual regional union catalogues varied from 48% to 89%. No information is given concerning the number of requests that could be satisfied by these locations, but if British experience can be used as a guide it may be in the order of 70% - 80%. Actual satisfaction levels will therefore range from 38% to 71%. Unfortunately no data are available on the overall satisfaction level for all requested publications (in whatever language); nor is a satisfaction level ascertainable for the 40% of requests that bypass the union catalogues and are sent directly to libraries. The study revealed a high failure rate for recent German-language publications and for particular subjects.

A survey of interlending in the United Kingdom conducted in 1977[8] showed that 97% of requests were satisfied (Figure 1). The British Library Lending Division supplied, mainly from its own stock, 73% of requested documents,

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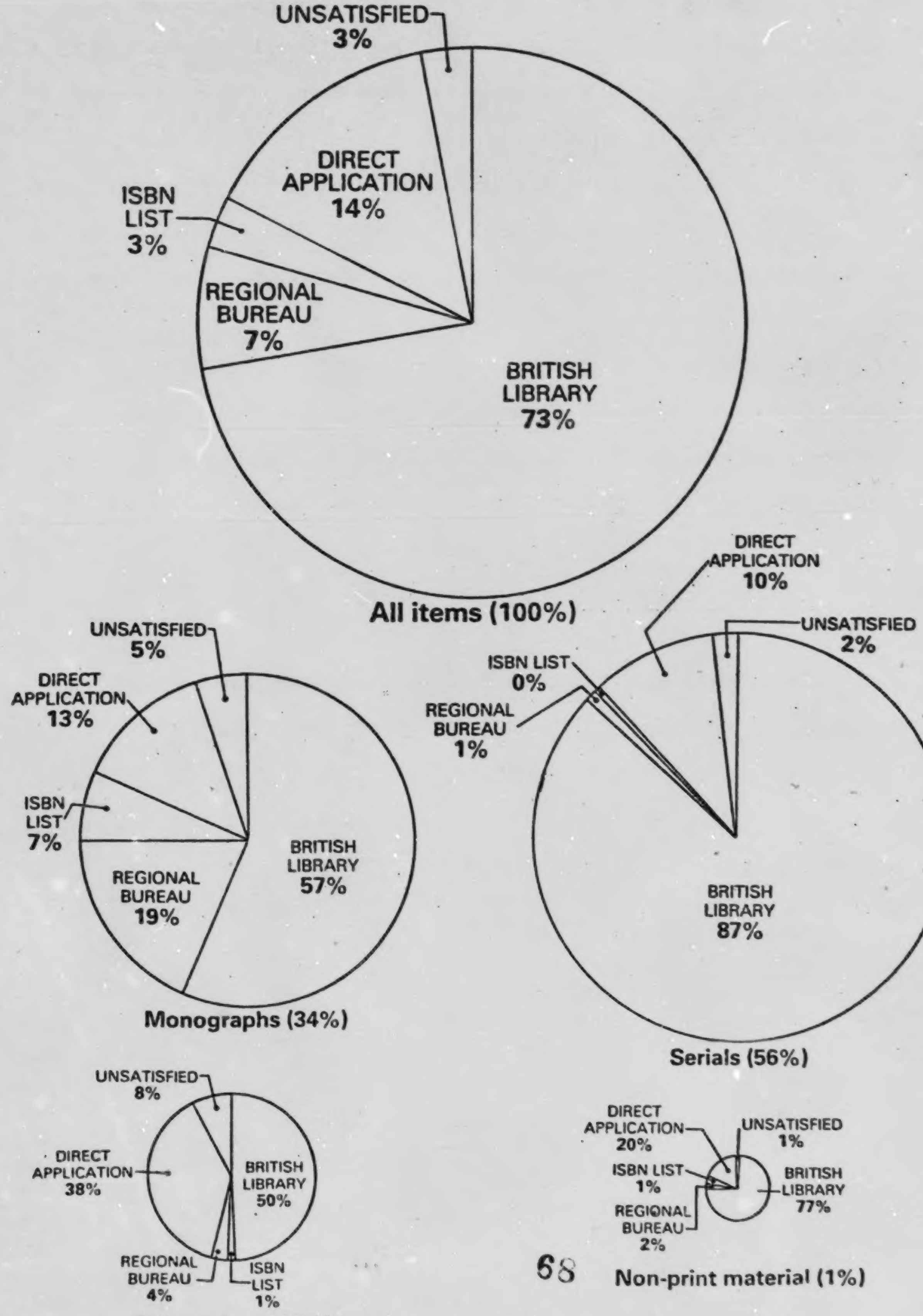
[6] Wood, James. *A review of the availability of primary scientific and technical documents within the United States. Final report.* Washington, DC, US Department of Health, Education and Welfare, Office of Education, Educational Resources Information Center, 1969, 3 vols. (ED 046 437-9)

[7] Zunker, Ernst. *Die Ausstattung der Leihverkehrsregionen mit deutschsprachigen Monographien ab Erscheinungsjahr 1945.* Berlin, Deutscher Bibliotheksverband, Arbeitsstelle für des Bibliothekswesen, 1977. (*Bibliotheksdienst* (Berlin), Beiheft 126). 54p.

[8] Line, M.B. and Steemson, R.J. *Interlibrary lending in the United Kingdom: report of a national survey carried out in February 1977.* London, British Library, 1978. 37 p. (British Library R & D Report no. 5417); Interlibrary lending in the United Kingdom: summary report of a national survey conducted in February 1977. *Interlending review* (Boston Spa), vol. VI, no.2, April 1978, p 31-38.

Figure 1: Satisfaction of interlending requests in the United Kingdom through different channels

NB. ISBN lists are union lists maintained by the regional systems, containing ISBNs with locations



All items (100%)

Monographs (34%)

Serials (56%)

Other printed (9%)

Non-print material (1%)

the regional systems about 11%, and libraries that received requests direct about 13%. The failure rate was rather higher for monographs than for serials. A separate study of requests received by the British Library Lending Division[9] - which include of course many difficult requests that cannot be satisfied through other channels - showed that over 83% were met from stock and a further 8% or 9% from other libraries, identified mainly by means of the national union catalogues maintained at the Lending Division. (It may be noted that between 20% and 30% of requests for which locations are found are not in fact met)[10,11]. Failure rates were highest for foreign language monographs.

Although the actual numbers of requests involved are not very large (7,700 a year), the ability of the British Library Lending Division to supply, from its own resources or those of other British Libraries, British monographs to foreign libraries is of special interest.[12] About 80% of British monographs so requested could be supplied. Allowing for the fact that requests from abroad would tend to be for 'difficult' items, this performance is still disappointing. No detailed information is available on the Lending Division's ability to supply to foreign libraries British serials; it must be well over 90%, since 89% of valid requests from abroad for all serials are satisfied from Lending Division stock (84%) or other libraries in the United Kingdom (5%), and British serials account for only 21% of overseas serial requests[13].

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[9] Wootton, C.B. and Ede, S.J. op. cit. (ref. 3).

[10] Yap, S.F. The locations service of the BLLD. BLL review (Boston Spa), vol. II, no. 4, October 1974, p.115-123.

[11] Steemson, R.J. Locations survey 1977. Interlending review (Boston Spa), vol. VI, no. 1, January 1978, p.23-25.

[12] Line, Maurice B. and Seal, Alan. The ability of the British Library Lending Division to supply British publications on loan to other countries. BLL review (Boston Spa), vol. V, no. 4,October 1977, p. 119-126.

There are obviously weaknesses in all of these systems, even allowing for the fact that they may be attracting a volume of demand near to saturation level. Disturbing features about the British and German systems are their inability to supply by any means all publications of their own countries (though in the case of the German survey, it should be noted that the study was concerned with books in the German language, not solely with books published in the Federal Republic of Germany). One reason for the apparently poor performance in the Federal Republic of Germany is that recent publications were evidently not being notified and entered in union catalogues quickly enough - a deficiency that is very hard to rectify, because much depends on the speed of acquisition and cataloguing of contributing libraries, although other delays may in future be reduced by entry of items into union catalogues on-line.

Although an overall 70% satisfaction level may be a reasonable minimum aim, the same level may not be necessary or desirable for all categories of material. For example, in the United Kingdom demand for monographs in languages other than English accounts for less than 2% of all interlending demand. To aim at the same satisfaction level for these as for say, English language scientific serials, which account for about 50% of all demand, would be unrealistic and uneconomic. This emphasizes the need to examine existing interlending demand before attempting to design or improve an interlending system.

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[13] Steemson, R.J. The performance of the British Library Lending Division International Photocopy Service. Interlending review (Boston Spa), vol. VI, no.3, July 1978, 94-96.

One factor affecting satisfaction rates in some countries is loss of documents in transit, evidently mainly as a result of inefficiency in the postal service or theft. This is obviously a serious matter, because apart from the requests that are not met because documents are sent and fail to arrive, lack of confidence in the service is bound to inhibit libraries from sending documents on loan. Moreover, some of the documents lost in this way may be the only copies in the country, and therefore unavailable for subsequent requests. There is little libraries can do about this except to use photocopies wherever possible in place of loans and to see if more secure means of transport can be used, at least for more valuable and less common items. Such means are more likely to be possible over relatively short distances - a factor that tends to favour local loan systems. The general problem of loss in transit goes far beyond libraries, and is one for attention by governments.

Satisfaction is not of course merely a matter of supplying an item: the reader is not 'satisfied' unless he receives the item he wants within a given time, and a request met too late should be considered a failure. The question of speed is considered in the next section.

4.2 Speed of supply

The speed of supply required depends on (a) the speed with which a user wants material if he is not to be hindered in his work, and (b) the speed of supply he expects and below which he feels frustrated. The first requirement, which we may call 'actual urgency', may be unavoidable, in that a user who has only just come across a vital reference may have to have it at once in order to prosecute important work. On the other hand, it may be due to faulty planning of his work, for example failure to conduct a full literature search at the beginning of a particular piece of research. In practice, it is probably very difficult to separate these two reasons for 'actual urgency', and studies suggest that in fact only a very small proportion of requests are seen to be really urgent in this sense.

In a survey in a number of British industrial libraries[14] of the effects of non-immediate access to material, 39% of the material was supplied by the British Library Lending Division within one week of requesting and a further 33% within two weeks. Of the 289 replies only 10% indicated that the delay had caused any inconvenience, and of these 29 people only 9 had to wait more than two working weeks. Of these 29 people, 10 found the article to be of considerable value, 15 of moderate value and four of low value. In a British medical library[15], rather more concern was expressed about delay, which caused inconvenience in 20% of cases. Delay in supply exceeded one week in only 17% of all cases, but interestingly inconvenience did not increase with the length of delay.

The US study cited above[16] found that 75% of librarians felt that material should be available within 14 days and only 18% felt that it should be available within seven days.

The other type of speed required, which we may call 'expected speed of supply', is clearly heavily dependent on the past performance of the system and the expectations to which it has led. The user who has been used to a 10-day service will perceive a delay of 3 weeks as a weakness, and a delay of, say, 3 months as perhaps intolerable. In another country, where performance was less good, a delay of 3 months might come to be expected as the norm. The effect expectations of supply speed have on the volume and nature of demand is likely to be considerable: low expectations will tend to lead to a reduction in the proportion of science requests, because these are likely to be wanted more urgently than other subjects. Likewise, serial articles are on the whole likely to be wanted more urgently than monographs (which in any case require more time for reading), and recent publications more urgently than older publications. Each request is an individual request, by an individual person for an individual item, and any categorization can only be crude, but, as a rough general guide, categories of material can be tentatively ranked in order of speed required as follows:

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[14] Houghton, Bernard and Prosser, Carolyn. A survey of the opinions of British Library Lending Division users in special libraries on the effects of non-immediate access to journals. Aslib proceedings (London), vol. XXVI, no. 9 September 1974, p.354-366.

[15] Barr, Diana and Farmer, Jean. Waiting for inter-library loans. BLL review (Boston Spa), vol. V, no. 1, January 1977, p.8-12.

[16] Palmour, Vernon, et al. op. cit. (ref.5) .

Scientific and technical serials
Scientific and technical report literature
Social science serials
Scientific and technical monographs
Social science monographs and report literature
Humanities serials and monographs.

As with satisfaction level, there is little objective information on the speed of supply of wanted items on interlibrary loan, except in the USA and United Kingdom. Some of this evidence has been cited above[17,18]. Also in the United Kingdom[19], it was found that 50% of material was received within 7 days of the request being sent - 6 days for serials and 12 days for monographs (Figure 2). This partly reflects the difference

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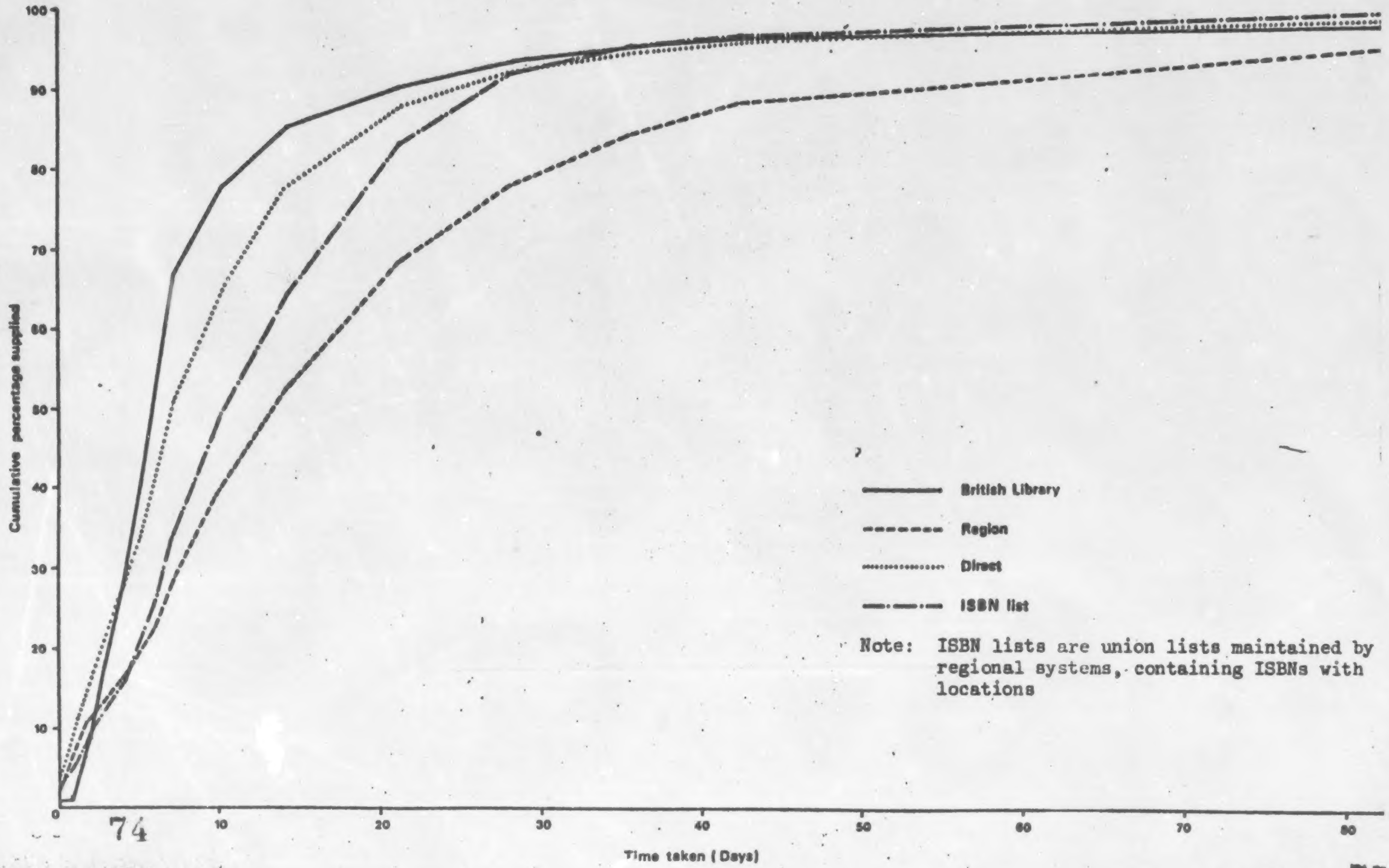
[17] Houghton, B. and Prosser, C. op. cit. (ref.14).

[18] Barr, D. and Farmer, J. op. cit. (ref.15).

[19] Line, M.B. and Steemson, R.J. op. cit. (ref.8).

Figure 2. United Kingdom interlibrary loan requests:
Cumulative percentage supplied against time for different successful channels



Note: ISBN lists are union lists maintained by regional systems, containing ISBNs with locations between sending a photocopy through the post and sending a monograph on loan. The median overall time for supply from the British Library was 6 days, while for the regions it varied from five days to over three weeks. It was found that 50% of requests that were sent to one library only were dealt with within six days, while it could take between five and six weeks if three applications were needed.

In the USA[20] it was found that 90% of requests were sent from the borrowing to the lending institution in six days, and 54% were sent within three days. It was further found that 50% of filled requests were processed by the lending library in three days, while 85% took seven days. The national average for processing time within the lending institution was 48.4% in three days and 82.9% in seven days. While no overall figures are available for the total time elapsed between initiating a request and receiving the required material, various studies within networks have shown it to be in the order of 20 days for most requests.

It is clear that a very important determinant of speed of supply is whether the first request for an item is successful: the more requests that have to be made for an item, the more slowly it will be supplied. Systems with a low chance of first-time success are likely to have poor average supply times. First-time success is determined by (a) the ability to locate a copy, (b) the probability that the item is available - eg. not in use or at binding, and (c) the willingness of the holding library to lend it - reasons for reluctance to lend include fragility, rarity, reference value or recency of acquisition.

Unless communication systems are very slow, the most serious interlending delays seem to occur not in transmission but in the requesting and supplying libraries, since transmission in most countries rarely takes more than a week or 10 days, while overall supply times of three or more weeks are common. If these delays can be reduced to a minimum by increased efficiency and more use of standard and simple procedures, adequate speed of supply can probably be achieved in most countries without major improvements in transmission time, which in any case are probably unattainable. Systems dependent on the cooperation of numerous libraries are likely to be considerably slower than dedicated loan collections, because the first responsibility of local libraries must always be to their own clients, and neither their arrangement nor their procedures can be designed specifically to serve interlending.

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[20] Wood, J. op. cit. (ref.6).

A reasonable aim for most countries would seem to be a maximum of 3 weeks for the majority of requests, with a capability of achieving supply within one week for requests identified as urgent.

4.3 Cost

It is necessary to distinguish between several kinds of costs: between direct costs (costs incurred in the requesting and supply of individual items) and indirect costs (overheads such as accommodation and depreciation of stock); within direct costs, between 'hard' or overt costs such as stationery, packing material and postage, and staff costs, which may be largely hidden; between recurrent costs (the costs of running a system from year to year) and capital costs (the costs of building up stocks); and between the costs incurred by libraries and the total costs, including those incurred by users. Also, costs can be very differently perceived by requesting libraries, which may find a central collection very economical to use, and by a government which may have to set up and maintain a central collection. Many value and indeed political judgments have to be made, for example how much high speed and satisfaction levels are worth, how much of the cost should be borne by requesting libraries, absorbed by supplying libraries, provided by the government, or even refunded by individual users. Ideally, in comparing the costs of different systems, all costs, other perhaps than those incurred by users, should be taken into account. Since hardly any information at all appears to exist on any of the costs associated with interlending, no such comparison can be made, and the best we can do is to indicate probabilities.

Given an aim of a certain satisfaction level and a certain speed of supply, how can these be obtained at minimal cost? It seems clear that high levels of performance can be achieved by developing dedicated loan collections containing comprehensive stocks of most material likely to be wanted on interlibrary loan, but how does the cost of this compare with the cost of attaining the same objectives by other means? Clearly, the higher the aims set, the more cost-effective is a dedicated loan collection likely to be, if only because, say, 90% satisfaction levels and average supply times of one week are likely to be virtually unobtainable by any other means. Conversely, low levels of satisfaction and speed may be attainable at low cost by a cooperative system with very little effort. However, it is suggested above that satisfaction levels much below 70% are unlikely to be economic in the long term, while the total costs of delay, though probably unquantifiable, may nevertheless be significant - in users' time wasted, or in inadequate research which leads to practical results that are more costly than they need be.

Although, as stated above, few costings appear to exist, some attempts have been made in the United Kingdom to cost various aspects of interlending. Lancaster University Library carried out quite a detailed comparative study[21]

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21. Ford, Jill and Ford, Geoffrey. The cost and supply delays of interlibrary loans at the University of Lancaster Library. BLL review, (Boston Spa), vol. III, no. 2,April 1975, p 47-50.

of the costs of requesting items from the British Library Lending Division and through the regional systems, and concluded that the former was considerably cheaper; the costs considered were only those incurred by the requesting library. Newcastle Upon Tyne Polytechnic Library came to similar conclusions[22]. Much the most comprehensive study, which endeavoured to take into account all costs (except those incurred by users), was that conducted in 1970-71 as part of the National Libraries ADP Feasibility Study[23], carried out immediately prior to the setting up of the British Library. This concluded that, in the United Kingdom, a central loan collection, was considerably more cost-effective than other modes of provision for categories of documents in moderate or heavy demand, while union catalogues were more cost-effective for documents in low demand. Relevant factors apart from the volume of demand include the cost of the categories of documents: foreign language monographs were not only in little demand, but to acquire them comprehensively would be extremely expensive. All three of these studies relate solely to the United Kingdom, but there are good reasons for believing that some at least of the results may be more generally applicable (see Chapter 5). A model taking account of the factors of demand and cost has been developed by Arms[24], based on his work for the National Libraries ADP Feasibility Study; this could usefully be tested in other countries.

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22. Harris, K.G.G. and Marsterson, W.A.J. Interlibrary book borrowing: a little analysis of services provided through the Northern Regional Library System and through the British Library Lending Division. BLL review (Boston Spa), vol. III, no. 2, April 1975, p.51-54.

23. Great Britain. Department of Education and Science. The scope for automatic data processing in the British Library. London, HM Stationery Office, 1972. Annex D : Interlibrary lending and copying. (vol. 2, p. 363-496).

24. Arms, W.Y. A study of interlibrary lending in Britain, with emphasis on the use of computers. D.Phil. thesis, University of Sussex, 1973.

5. FEATURES OF EXISTING INTERLENDING PRACTICES

A thorough literature search (see Annex 1) has enabled a general picture of interlending in various countries to be constructed, but with many gaps in the information. A summary is attempted here.

In no country can interlending practices be characterized by one single element, nor is this ever likely to be the case. Even central loan collections can never be comprehensive, and other means such as union catalogues will be necessary to provide access to older material. It is therefore extremely difficult to draw together threads from the varying practices to be found in the countries described. While it has been possible to identify various elements of interlending practice within any given country, only in a few countries is the relative importance of these elements known. In a hierarchical system, what percentage of demand is satisfied by each level of provision? Where subject collections exist within a system, how much of the demand is dealt with directly by these collections? Are these subject collections dedicated to interlending, or do they merely reflect the bias of specialized research institutions? Such differences could have a profound effect upon the pattern of interlending. Why, and to what extent, is interlending conducted on a direct basis? Is it due to the lack of relevant location tools, in which case a request may be sent straight to the most promising source of supply, or is it because published lists of holdings exist, or does it simply reflect a lack of confidence in a supposedly organized system? Much of the information needed to answer these questions is lacking. Certain broad generalizations can however be made to describe current practices.

SUMMARY TABLE OF CHARACTERISTIC ELEMENTS OF INTERLENDING PRACTICE IN VARIOUS COUNTRIES

Country	Centralised handling of requests and/or supply of documents	Existence of union catalogues	Existence of specialised subject collections	Circulation of requests through several institutions	Hierarchical structure	Direct application	Organisation on a regional basis	Unstructured flow of requests	Existence of a co-ordinating institution
Argentina		✓				✓		✓	
Australia	✓	✓				✓			
Austria	✓	✓		?			✓		
Belgium		✓		✓		✓		✓	
Brazil	✓	✓				✓	networks	✓	
Bulgaria		✓	✓		✓		✓		
Canada	✓	✓		?		✓	✓		
Columbia		✓				✓		✓	
Czechoslovakia		✓	✓	✓					✓
Denmark		✓			✓	✓			
Finland	✓	✓	✓		✓	✓	✓		✓
France	✓	✓		✓		✓		✓	
Germany DDR		✓	✓	✓	✓		✓		✓
Germany BRD		✓	✓	✓		✓	✓		✓
Greece		✓				✓		✓	
Hungary		✓	✓	✓	✓		✓		✓
Iceland		✓				✓		✓	
India		✓				✓		✓	
Ireland	✓	✓				✓			
Israel		✓				✓		✓	
Italy	✓	✓				✓		✓	
Kenya		✓				✓		✓	
Korea		✓				✓	networks	✓	
Luxembourg	✓	✓							
Malaysia		✓				✓		✓	
Mexico		✓				✓		✓	
Netherlands	✓	✓			✓	✓	✓		
New Zealand	✓	✓		✓		✓			
Nigeria	✓	✓				✓			✓
Norway		✓				✓	✓		
Poland		✓		✓		✓	✓		
Portugal		✓				✓		✓	
Singapore		✓				✓		✓	
Spain	✓	✓				✓			
Sweden		✓	✓		✓	✓	✓		
Switzerland	✓	✓		✓					
Tanzania		✓							
Turkey		✓							✓
USSR		✓			✓		✓		
UK	✓	✓	✓			✓	✓		
USA		✓				✓	✓		
Yugoslavia		✓					✓		

Only in a few countries do we know the relative importance of the various elements of interlending practice.

5.1 Union lists

Union catalogues or union lists are to be found in all the countries described, though their number and coverage vary enormously from country to country. There are, for example, over 600 union catalogues in the USSR, while in some countries there are only one or two. It is significant that in many countries union catalogues are restricted to the coverage of foreign material. One may suspect here an underlying assumption that all worthwhile national imprints will be purchased and that therefore their availability need not be questioned. There is usually no such wide coverage of foreign publications, and union catalogues are therefore necessary to identify holding libraries. The inability even of countries that have highly developed interlending systems to supply all national imprints has been made clear by recent studies in the United Kingdom and the Federal Republic of Germany (see Chapter 4). Archival collections do little to help general availability, though their existence will be necessary to guarantee the presence of national imprints within a country. A valuable extension of the location function of union catalogues is to be found in the German Democratic Republic, where the production of the Union catalogue of foreign periodicals and series is computerized. Various subsets can be produced that can enable librarians to rationalize the acquisition of foreign serials within the country as a whole.

Overall, union lists of serials are much more common than union catalogues of monographs. This may be partially explained by two factors. Firstly, in many countries the demand for serials exceeds that for monographs; and secondly, union lists of serials are more easily maintained as they require less frequent updating, and most demand will fall upon titles that are already listed. More union lists of serials than of monographs are therefore found in published form. Union catalogues of monographs tend to be larger and it is much more difficult to keep them up to date. They are therefore seldom found in published form unless they relate to a particular period of past acquisitions. Countries in which published union catalogues are to be found include the United States of America, India, Australia and the United Kingdom; the availability in published form of the regional union catalogues of the Federal Republic of Germany is also being considered. Because of their size, many published union catalogues are in microform. Their value for interlending depends upon the currency of information and frequency of publication, and hence the proportion of demand for which they can cater. National and regional union catalogues, however, are normally unpublished and are housed in a national library or regional co-ordinating library; such is the case, for example, in Austria and Switzerland on a national level, and in the German Democratic Republic and the Federal Republic of Germany on a regional level. Such catalogues may or may not be allied to a lending stock. The national libraries of Austria and Switzerland both lend material from their own stocks, as do most national libraries, while the regional union catalogues of the German Democratic Republic and the Federal Republic of Germany merely identify locations. It has been suggested however that all the regional union catalogues of the Federal Republic of Germany should be allied to a lending stock to minimize delays. Union catalogues for particular subjects are to be found in a number of countries. There is a marked tendency for these to cover scientific, technical and medical fields, which again can be seen as a reflection of high demand.

The relative importance of union catalogues in national interlending is difficult to establish. It is known that in the Federal Republic of Germany some 70% of requests are handled by the regional union catalogues and that a sizable proportion of direct interlending is facilitated by published union catalogues. It also appears that in the United Kingdom union catalogues are used, whether direct by libraries or by regional bureaux and the British Library Lending Division, for less than 22% of interlending.

5.2 Direct requesting

The second most commonly observable feature of current practice is direct requesting. It is highly probable that some interlending is conducted on such a basis in nearly all countries; its proportion will obviously vary according to other aspects of interlending practice prevailing within a country. In a system with centralized provision, individual libraries may approach the central loan collection directly, and the volume of direct requesting between individual libraries is likely to be relatively small. In the United Kingdom direct application accounts for some 16% of requests for interlibrary loans. At the other end of the scale, in countries that lack formal organization for interlending, the bulk of requests may be sent directly to libraries thought most likely to hold desired items. Published union catalogues facilitate direct requesting and in some countries, such as the Federal Republic of Germany, direct application to subject collections may be permissible. Alternatively, direct requesting may be limited to a particular sector, such as research libraries in Denmark and Norway. The quality and quantity of direct application are very difficult to assess, and its importance within a country with an organized system that handles the majority of requests is difficult to establish. Apart from the figure given above for the United Kingdom, it is known that some 30% of requests in the Federal Republic of Germany are sent directly to holding libraries through the use of published union catalogues, or are sent directly to subject collections, though access to these collections is also provided by the union catalogue of the region in which the subject collection is situated.

5.3 Centralization

Some degree of centralization is also common to many countries. Centralization can take several forms, the commonest being the channelling of requests to one central institution that maintains an unpublished union catalogue, as is the case in Switzerland and New Zealand, and to a lesser extent in Spain, Austria and a number of other countries. The degree of such centralization obviously depends upon the extent of coverage of the union catalogue. In some countries centralization may be for a particular category of document, such as foreign monographs in France. In certain countries, such as New Zealand, the central institution that maintains the national union catalogue will lend material from its own stocks, though this is often limited to material for which locations in other libraries cannot be found.

Alternatively, centralization may apply to the source of supply, as is the case for the majority of interlending in the United Kingdom. The British Library Lending Division receives 78% of all loan requests and supplies, directly or indirectly, 73% of all material sent on interlibrary loan. Even in such a highly centralized system, there is a network of regions, created in the 1930s, which maintain union catalogues, and union catalogues are also maintained at the British Library Lending Division to help locate material not available from its central stocks. While the United Kingdom provides the most prominent example of centralized provision, it may be seen in a limited form in those countries where a certain amount of material is lent from the central institution that maintains the national union catalogue. A closer approximation to the situation in the United Kingdom is to be found in France, which exhibits two forms of central supply - the Service Central des Prêts and the Centre de Documentation Scientifique et Technique of the Centre National de la Recherche Scientifique. The services of the latter, however, are allied to an abstracting service, and material is made available in the form of reproductions only; its service is therefore somewhat restricted by copyright requirements.

5.4 Regional organization

Regional organization is to be found in a number of countries. As in the Federal Republic of Germany, this may be due in part to the federal structure of a country, though, as noted, interlending on a regional basis also exists in the United Kingdom. Interlending regions may be coterminous with the areas designated for a system of regional legal deposit, as in Austria. Regions may maintain union catalogues, as in Yugoslavia, the German Democratic Republic and the Federal Republic of Germany, although this is no requirement of regional organization - not all of the regions of Austria maintain union catalogues. Whether regional systems have union catalogues or not, a co-ordinating library for the area is usually present. Such a co-ordinating library may maintain a loan stock, as is the case in Finland, although the interlibrary lending centres in Sweden do not maintain such collections. Regional organization may be limited to a particular sector of library provision, such as public libraries in Finland and the Netherlands.

5.5 Circulation of requests

The circulation of requests by means of a rota is also to be found in several countries. Requests from university libraries in France may be circulated to other university libraries, in an order that is predetermined by the requesting library, until satisfied. Alternatively, a request that has been checked against a union catalogue without finding any locations may then be circulated through the other regional union catalogues, as in the Federal Republic of Germany and the German Democratic Republic. Again, requests may have to be circulated through the various locations that have been identified by the union catalogues. In the German Democratic Republic the circulation of a request through all the regional union catalogues is necessary before it can be sent to a higher level of provision. A rather different form of circulation is the loans circular which is used in New Zealand. Here, instead of circulating requests through a number of libraries the bibliographical information is transferred to a list, after all the usual channels have been exhausted; the list is then circulated to a number of major libraries, which check for possible holdings.

5.6 Subject specialization

Subject specialization, which is rarely found in isolation within a country, may be planned as an element of interlending, either in the form of subject collections that are dedicated to interlending as in the Federal Republic of Germany, or as a result of co-operative acquisition schemes, as was the case in the United Kingdom. Alternatively it may occur by virtue of the nature of a particular research institution, as in Finland where an existing library in a particular field may be appointed as a national central library for that field and accept certain interlending responsibilities. It may be possible to approach such collections direct, as in the Federal Republic of Germany, or they may be built into a hierarchical system, as in Hungary, Sweden and Bulgaria. De facto subject specialization may exist in developing countries, where particular fields such as medicine or agriculture may be considered to be of prime importance, and may have benefited from particular development programmes, either as a matter of internal policy or with the assistance of foreign aid.

5.7 Hierarchical structure

Neither subject specialization nor hierarchical provision is limited to any one type of system, though, as in Bulgaria, the system itself may be a hierarchical one, in which requests are passed from an individual library to a central library, to a relevant subject collection and finally to the national library. Alternatively a hierarchical approach may be adopted for a particular sector of library provision, such as the public library sector

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in Denmark and Sweden, or requests, having passed through a regional or rota system, may progress to a higher level of provision, as in the German Democratic Republic, where requests are accepted at the Deutsche Staatsbibliothek only when they have passed through all the regional union catalogues. If a request still cannot be satisfied, it may then be passed to the Deutsche Bücherei. Even in a highly centralized system such as is found in the United Kingdom, the term 'hierarchical' may be applied, in that requests may be passed from an individual library to the relevant regional bureau and thence to the British Library Lending Division.

5.8 Conclusions

Such are the main elements of interlending practice to be found in the countries described. No single feature is found in isolation in any country, and the relative importance attached to any one element will depend upon the efficiency of other elements of the system. Ideally all elements will combine to create the most efficient total system. In spite of the lack of detailed information, it may safely be stated that this is not the case in most countries.

All countries for which information is available have union catalogues, in some cases very extensive and in others very numerous. There is often some co-ordination, but it seems that by no means in all cases are all even of the most important union catalogues under one control, though where there is a national union catalogue it is often held by the national library. Little indication is given of the use made of union catalogues, let alone of their effectiveness or costs.

Most countries have a focus for interlending, but its role varies very widely. In some cases it serves mainly as a switching centre for international loan requests, and in others as the main point to which national requests are directed. It may also have a co-ordinating function. It is often associated with the national library. It is not clear in most countries where responsibility for interlending - for planning, supervision and monitoring - resides, nor indeed whether such a responsibility is recognized. When it is assumed by the national library, it tends to be regarded as marginal to the central functions of serving as a national reference collection and national bibliographic service.

What libraries actually do when their clients require material that they do not have is rarely indicated. Nor is the success or speed with which their requests are met, nor the costs, to them or in total, of interlending. This is the most serious deficiency in the information available for the purposes of this report.

There seems to be a clear need for more, and better, descriptive studies of interlending in different countries. These studies should aim to provide a comprehensive picture rather than the glimpses of certain elements and aspects that have hitherto been most common in the literature; these glimpses certainly have their place, but they need to be seen in a total context. Such surveys as those recently undertaken in the United Kingdom[1] and the Federal Republic of Germany[2] may be mentioned as examples that might well be followed elsewhere.

1. Line, M B and Steemson, R J. Interlibrary lending in the United Kingdom: report of a national survey carried out in February 1977. London, British Library, 1978. 37 p. (British Library R & D Report no. 5417); Interlibrary lending in the United Kingdom: summary report of a national survey conducted in February 1977. Interlending review (Boston Spa), vol. VI, no. 2, April 1978, p. 31-38.

2. Zunker, Ernst. Die Ausstattung der Leihverkehrsregionen mit deutschsprachigen Monographien ab Erscheinungsjahr 1945. Berlin, Deutscher Bibliotheksverband, Arbeitsstelle für des Bibliothekswesen, 1977. (Bibliotheksdienst (Berlin), Beiheft 126). 54 p.

6. MODELS OF NATIONAL INTERLENDING SYSTEMS

It was hoped at the outset of this study that models could be identified from an examination of existing interlending systems, or that existing systems could be used to illustrate models. It is evident from the previous chapter that remarkably little is known of the operation of interlending in most countries, and that, as pointed out in the Introduction, very few countries can be said to have interlending 'systems'. In this situation, the most useful approach seemed to be to identify possible models on the basis of the analysis presented in the preceding chapters, adducing evidence from existing systems as available and appropriate.

The possible range of potential models is very large; the more so because different models may be constructed for different forms of material such as monographs and serials, or even for different subjects. Our approach here is to outline several basic and combined models in terms of perhaps the most important factor, and then to consider other major factors relevant to the design of interlending systems. Mathematical modelling has not been attempted; the number of factors involved is large, and their relationship is very complex; more important, some of the most significant factors (eg. political, geographical and administrative) cannot be measured in any meaningful way, and any general model constructed on a foundation of arbitrary values would be basically unsound. This is not to say that, within a given country, and with various basic factors known, modelling techniques could not then be usefully applied, though even then it is often difficult to attach values to certain essential parameters. Simple models[1] may

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1. Arms, W.Y. A study of interlibrary lending in Britain, with emphasis on the use of computers. D.Phil. thesis, University of Sussex, 1973.

prove as useful for practical purposes as complex ones.[2] The greatest value of modelling techniques may well be in limited aspects of interlending, eg. in determining duplication policies or in designing union catalogues.[3,4]

There are several basic factors to be borne in mind:

1. Degree of centralization. The provision of material may be more or less centralized, and so may the mode of access to material; these two aspects interact to some extent but have a certain interdependence.

2. National or regional (sub-national). The extent to which the system is designed as a single national system or on the basis of regional systems (or state systems in the case of some federal countries).

3. Hierarchical nature. A system may be designed on a monolithic or hierarchical basis; hierarchy of provision and hierarchy of mode of access are obviously closely linked.

4. Unity of provision to all libraries. All types of library may be served by a single system, or by different systems, which may or may not be linked.

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[2] Rouse, William B. A library network model. Journal of the American Society for Information Science (Washington), vol XXI, no. 2, March-April, 1976, p.88-99.

[3] Buckland, Michael R. The quantitative evaluation of regional union catalogues. Journal of documentation (London), vol, XXIII, no. 1, March 1977, p.20-27.

[4] Arms, W.Y. Duplication in union catalogues. Journal of documentation (London), vol XXIX, no. 4, December 1973, p.373-379.

5. Unity of provision for all types of literature. Literature may be provided by a single system or by different systems: possible divisions are by subject, language, date, or form.

Each of these is discussed in turn. Because of its fundamental importance, the degree of centralization is used in constructing the basic models, and the other factors are then considered.

6.1 Degree of centralization

6.1 a. Centralization of provision

Total centralization of provision - the provision of all required material in one single collection - is unattainable, if only because the literature of the past could not be gathered in such a collection. Total decentralization - all libraries playing a more or less equal part in interlending - is equally impossible, because libraries are very unequal in the collections they have. We therefore consider various degrees of centralization and decentralization between these extremes, and the general bias of the system towards or against centralization. Four levels of concentration may be identified, although even these are unlikely to exist in their pure form, and, as will be seen, they constitute a continuum rather than clearly distinct entities, and in practice systems will approximate to composite models, which are also discussed. Since the four levels of concentration constitute basic models, which will be used later as reference points, they are called here A, B, C & D.

Model A. Concentration on a single library

The concept here is of a single collection on which interlending demand is concentrated. Such a collection may be *dedicated* solely to interlending, serving this and no other purpose, or may *share* the interlending function with other functions.

A dedicated lending collection would almost certainly have to be mainly built up specifically for the purpose, unless an existing large library were willing and able to surrender its present functions; but it could draw on some of the resources of other libraries in order to build up a collection, especially of older material. Once built up, it could serve as a repository to which material withdrawn voluntarily by other libraries (eg for lack of space) could be sent, so that its collections would gradually be enriched. A shared library would be one, perhaps a national library,[5] that combined lending to other libraries with a service to its own clients. The attraction of this solution is that resources do not have to be duplicated to the same extent as if a dedicated collection were set up. The danger is that the two functions may conflict, so that either or both will suffer; since the local clients are likely to demand an adequate service, the interlending service is the more likely to suffer. The conflict that can arise because the same items are wanted at the same time by local clients and by other libraries can be largely resolved by the use of photocopies wherever possible in place of loans, and by adequate duplication of the most wanted items - an easier task for serials than for single publications such as monographs. The problem may in any case be little more serious than that of providing sufficient copies of wanted items to serve local clients.

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[5] Urquhart, D.J. National lending/reference libraries or libraries of first resort. *BLL review* (Boston Spa), vol IV, no. 1, January 1976, pp.7-10.

More fundamental may be a conflict of systems; a library geared to serve local clients may not be geared to give a fast service to other libraries, especially if much of its collection is on open access and in subject order. For example, some of the methods used at the British Library Lending Division, such as the shelving of most items in alphabetical order by title for fast direct retrieval and the binding of serial issues individually rather than in volumes to ease photocopying and save postage costs, would not be appropriate in most university libraries. One solution to this difficulty, which is attractive for other obvious reasons, is to combine national lending with national reference functions. Much, probably most, of the national reference collection will be on closed access, and the retrieval of material from closed stacks to serve local readers is no different from its retrieval to serve distant readers; the only difference is in the mode of supply. The obvious disadvantages are that items sent to remote readers are likely to be away a few weeks before they return to the shelves, and it is difficult to retrieve them quickly meanwhile; and that loss or damage may occur. Against this must be set the fact that in most countries most potential users of the national collection are not within such easy reach of it, so that for them regular consultation is not possible; and that the readers who could obtain items from it on interlibrary loan would otherwise either have to travel to it, often at considerable cost and inconvenience, or, worse, fail to obtain the items at all. Since the aim of a national library is to serve the nation's readers as well as to preserve the national archive, a strong case can be made for serving remote as well as nearby readers as part of the library's main role rather than as an occasional peripheral activity.

Provision can be centralized or concentrated on a single library up to varying levels of satisfaction. At one extreme, a library like the Center for Research Libraries in the USA can aim to hold material that other libraries do not buy or that they discard, so that the percentage of interlending demand with which it can deal is very small. This may be called residual centralization. At the other extreme, the British Library Lending Division may aim at very high levels of satisfaction - over 80% - from its own stock. (A distinction must be made here between the proportion of demand that a library *can* satisfy, the proportion of *actual demand on it* that it *does* satisfy, and the proportion of *total demand in the country* that it handles and satisfies. In the case of the British Library Lending Division, it *does satisfy* 83.5% of actual demand on it; it *handles* 78%, and *supplies from its own stock* 70% of all interlending requests in the UK. Thus, a collection may be *capable* of satisfying a considerably higher proportion of demand in a country than it is actually *required* to do). There is no reason why a central collection should not aim at lower levels than 80%, or at different levels for different kinds of material - say 80% for serials and 50% for monographs. This question of the relation of a central collection to other sources of supply is further considered below.

The size of central collections will depend partly on the base from which they start (eg. they may inherit another collection), partly on the older literature they are able to acquire as other libraries dispose of it, but mainly on the scale of current acquisition as determined by the satisfaction level set as an aim. It seems likely that 90% of interlending demand for serials can be met by between 8,000 and 9,000 titles and 80% by between 5,000 and 6,000 titles. It also seems quite probable that lists of 'core' titles, up to, say, 2,000 or 3,000, do not differ greatly between different countries; if this is so, a general 'core' list could form an invaluable planning tool. Both the size and the contents of 'core' lists in selected countries deserve study.

The number of monographs required to reach such satisfaction levels is much harder to determine, largely because advance identification of titles that will be requested is extremely difficult, so that it is necessary to acquire many items that may never be wanted in order to make sure that most of those that will be wanted are acquired. Perhaps an intake of around 100,000 monographs a year might be sufficient to satisfy 80% of demand, but this figure is the roughest approximation.

Central loan collections must be very carefully located to minimize costs and times of transmission, both of requests and of items requested. If they are shared with existing national reference collections, there will probably be no choice of location, but combined national reference/loan collections built up from scratch, eg. in developing countries, should be sited so as to serve as fully as possible loan as well as reference needs.

Dedicated (though not shared) loan collections can, by being specifically designed for interlending, achieve great economies - not only economies of scale, but economies of operation, for example by using simplified cataloguing methods (the catalogues, unless published, are used only by staff and no classification or other form of subject analysis is required).

Whether or not other provision is concentrated on a single library, it is the obvious way of making proper provision for the supply of national imprints on interlibrary loan. This may be most easily achieved if legal deposit of an extra copy of each publication in the collection is required. To ensure such provision in any other way would be very difficult.

Before a comprehensive central collection is seriously considered, it should be established whether or not such collections exist in neighbouring countries. Much or most of a truly comprehensive collection will receive very little use and it would be very wasteful to duplicate such material if ready access to it can be obtained.

The advantages of concentration of provision on a single library are considerable, as can be seen from the numerous ways in which they can improve interlending (see Chapter 7). The main advantages can be summarized as follows:

1. It offers a single channel to which most or many requests can be sent, thus simplifying procedures and saving transmission costs.
2. It can match provision to demand fairly easily, because it is a main recipient of requests and can monitor its performance.

3. It can provide marginal material fairly easily.
4. The provision of national imprints can be more easily ensured.
5. It can be organized specifically for interlending, or at least for fast retrieval and supply of specific items.
6. Direct costs of handling requests are low because of economies of scale and because special procedures can be devised.
7. It is economical for libraries to use.

The main disadvantages of concentration on a single library are:

1. High costs of setting up and maintaining central collection - stock, buildings, staff, equipment, etc. (greatly reduced if shared with reference collection).
2. High unit costs unless demand is heavy.
3. Possible uncertainty as to future financing.
4. Risk to damage to central collection (eg. by fire).
5. Possible danger of a monopoly (eg. imposition of high charges).
6. Possible unleashing of 'unnecessary' demand (should be reduced by local screening of requests, and by the costs of interlibrary borrowing).

Model B. Concentration on a few libraries

In many countries, a high proportion of all the works (titles rather than copies) that are held in the country's libraries are contained in a few or very few libraries. For example, in Denmark the Royal Library, the State and University Library at Aarhus, and the Danish Technical Library between them must

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hold a very high proportion of all publications in Denmark, including all Danish imprints and perhaps 15,000 different serials - enough to satisfy well over 90% of all demand for serials if, as would be expected, they include those most in demand. Many other countries must have a similar situation. It is most likely to be most favourable where there is some differentiation between the libraries in question, for example if one concentrates on the humanities, another on science and technology, and a third on medicine. With three large general libraries, there will probably be a large overlap in holdings, in which case one of the libraries will need to serve as the main channel for requests (distributing them where necessary to the other libraries); and also the total provision may be less complete.

Concentration of this kind has the great advantage that it does not require the establishment of a dedicated collection, but only the adjustment of routines in the selected libraries to enable them to give a remote lending service. The extent of the adjustment that may be needed should not however be underestimated. There may be a severe conflict with service to local clients unless serious efforts are made (for example) to duplicate items where necessary and to provide adequate photocopying, packing and dispatch facilities. It is easier to supply serials with such a system, because most requests can be satisfied with photocopies, than monographs and other material which usually has to be lent. It should however be noted that up to 20% of serials requested may not be amenable to photocopying, whether because a whole issue is required (it may for example be devoted to a single topic) or because the the illustrations do not lend themselves easily to reproduction.

Although the present holdings and intake of selected libraries may be adequate to give a good service, the service could in many cases be improved by concerted efforts to fill gaps in the collections, as well as to duplicate where required, and for this extra money is required. However, the sums involved are small compared with those associated with single dedicated loan collections.

A greater problem is that of financing the lending service: the costs of checking requests against catalogues, retrieving items from shelves and possibly photocopying them, packing them and posting them; not to mention the unpacking and reshelving of returned loans. The costs of these operations will, in an efficiently organized system, be at least £1 for photocopies and £1.50 for loans. It would seem quite unreasonable to expect the libraries in question to bear such costs and provide an efficient service, and the costs should therefore be reimbursed, whether from central government funds, from transaction fees, from annual subscriptions by user libraries, or by a combination of these methods.

Both the advantages and disadvantages of concentration on a few libraries are less than those of Model A, concentration on a single library; costs and dangers are less, but so is effectiveness.

For such a system to be effective, strong central planning and coordination are essential. This can easily be achieved if one of the libraries involved is the national library. In any case, as was pointed out at the beginning of this chapter, total centralization is unattainable, and the level of satisfaction aimed at may be no higher than 60% or 70%. Access is therefore necessary to the resources of other libraries, and since this too must be planned the same control mechanism should serve for both.

There are virtually no examples of this model at present, although some countries have systems that approach it.

Model C. Planned decentralization

Decentralization can be planned or unplanned; in the latter case, access may simply be provided to the existing resources of other libraries, whose collections are designed to serve their own clients. This is considered in the next subsection.

Planned decentralization can take several forms, but their common feature is that the provision of material is allocated to some extent between libraries on a more or less systematic basis. In some countries, notably the Federal Republic of Germany, strong subject libraries may be set up (or existing strengths enhanced), and interlending stated as one of their functions so that interlibrary loan requests can be sent direct to such libraries with a fair or high probability of success. If there are only three or four such libraries, they will conform to Model B above; in most cases, however, there will be many more, perhaps (as in the Federal Republic of Germany) organized on a hierarchical basis.

The advantages of such a system are:

1. Many or most requests can be sent direct.
2. Extensive resources can be developed that will serve local subject specialists as well as national needs.
3. Additional costs of provision are not high.

Disadvantages include:

1. The total national costs in such a system may be high because of the extensive duplication that is likely to occur among the special subject libraries themselves and, even more, between them and other research libraries.
2. Conflict may arise between lending and other functions.
3. Procedures have to be adjusted to give an efficient lending service.

An alternative kind of planned decentralization is the superimposition of specialization on general libraries, which are expected to acquire additional items within prescribed limits. Cooperative acquisition schemes may take the form of allocating the whole field of knowledge on a subject basis among libraries, as is attempted for British monographs in one or two of the regional library systems in the United Kingdom; or, perhaps more rationally, general libraries with special subject strengths may be required to build on them. Other forms of allocation are possible; for example, the purchase of British fiction is allocated among London public libraries according to authors' names and their place in the alphabet. Other bases of allocation are by language, by country of publication, or by date (partial examples of all three exist in the United Kingdom).

The major disadvantage of superimposed specialization is that it requires libraries to buy material that they do not need for their clients. It is therefore very vulnerable at times of financial stringency, and indeed many such schemes have weakened or died during such times. It is true that special financial support can be sought to buy the extra books, but in that case it would be more economical to use the money to add the books to a central collection. Another disadvantage is that permanent retention of items so acquired is difficult to ensure, even if they are separately stored.

A further difficulty is that of ensuring that all the libraries holding the material in question are able to supply it quickly on interlibrary loan, when interlibrary lending will form only a very small part of their operations. Finally, requests have to be directed to a large number of libraries.

So far as can be seen from the scanty evidence, interlending systems based on cooperative acquisition schemes do not have a very good record, either in the proportion of requests satisfied or, particularly, in speed of supply.

Model D. Unplanned decentralization

Most existing 'systems' are basically of this nature; that is, the libraries in the country are taken as they are, without any special attempt at subject or other specialization, and their resources are made available to other libraries by means of union catalogues. The rationale of such a system is obvious. No additional resources of provision are required, all or most libraries in the country are voluntarily involved in a cooperative activity, and between them it is probable that they will hold a high or fairly high proportion of all items wanted on interlibrary loan.

The disadvantages are equally clear. Unplanned decentralization cannot ensure that less common documents are acquired, so that provision is almost certain to be very incomplete. Even if

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additional resources of provision were not needed, substantial resources are necessary to construct and maintain the union catalogues on which the whole system depends. To achieve the active and continuing cooperation of a large number of libraries is difficult. The accuracy, and therefore the usefulness, of union catalogues depend on the conscientiousness of libraries in reporting, quickly, not only new acquisitions but also losses and withdrawals. Although the most commonly requested items are fairly certain to be held by at least one of the cooperating libraries, it is highly unlikely that all cooperating libraries will, or can, give a fast and efficient service. Libraries that receive a large number of requests may be able to justify the employment of a full-time assistant,but extra staff have to be paid for; and most libraries will not receive nearly enough requests to justify special staff. Conflict with the service to local clients is difficult to avoid; it can be reduced if serials are not lent out, but available only for consultation or by photocopies of required articles, but not all serial requests can be met with photocopies, and libraries can hardly be expected to adjust their loan policies for the purpose of interlending. There is no way of ensuring that provision matches demand, or even of finding out easily whether it does or not. The hidden costs are therefore high, and the effectiveness likely to be low. The distribution of requests is bound to be very uneven, and overload on a small number of the largest libraries is likely to occur, as has indeed occurred in the USA. Indeed,unplanned decentralization may result in unplanned concentration on a few libraries.

In a modified form of this system, those libraries that contain few or no unique items can be excluded, so that the number of cooperating libraries may be reduced to a manageable number. This may be especially desirable when this model is used to support Model A or B.

Composite models of provision

As explained above, even a very high degree of centralization cannot by itself achieve an ideal performance, because all required publications of the past cannot be acquired, and also because totally comprehensive coverage of current acquisitions is unattainable. Except in countries with virtually no existing libraries at all, there are bound to be other libraries that hold both past and current publications not held by the central collection. The same applies to Model B, in which provision is concentrated on a few libraries.

Centralized systems must therefore be supported by other systems, on the lines of Models C or D. Models C or D can exist without support by Models A or B, but they may support one another. There are several possible combinations, even if the question of different provision for different kinds of material is ignored. The main combinations are as follows:

Model AC. Single library supported by planned decentralization

The concentrated collection could be supported in different subject fields by specialized collections, or could leave provision in certain specialized areas entirely to specific libraries (as, in the United Kingdom, the British Library Lending Division at present leaves the loan provision of monographs in oriental languages to the School of Oriental and African Studies in the University of London). If however the central collection is effective for a high proportion of requests, it is questionable whether the supporting system needs to be planned, or whether unplanned decentralization cannot give adequate support.

Model AD. Single library supported by unplanned decentralization

The concentrated collection could be supported by access to unspecialized libraries, possibly selected as having resources in which the central collection is less strong. (The British Library Lending Division, which acquires few foreign language monographs systematically, maintains union catalogues of the foreign language monographs acquired by about 70 selected libraries).

Model ACD. Single library supported by both planned and unplanned decentralization

As the two examples above show, both kinds of support are used by the British Library Lending Division.

Model BC. Few libraries supported by planned decentralization

Similar to AC above.

Model BD. Few libraries supported by unplanned decentralization

Similar to AD above.

Model BCD. Few libraries supported by both planned and unplanned decentralization

Similar to ACD above.

Model CD. Planned decentralization combined with unplanned decentralization

Subject or other specialization schemes could be combined with access to other libraries not involved in such schemes; either type of decentralized provision could be the basic system that was supported by the other, or they could be loosely coordinated.

All of the above combinations assume some form of planning. In most countries at present, various kinds of provision coexist, without any prior planning and without much current coordination.

6.1 b. Centralization of access

Access to resources can be mainly centralized, partly centralized, or entirely decentralized.

i. Centralization of access can be achieved only with a national interlending centre to which many or most requests can be directed. If a central loan collection is maintained and there is a very high probability that requests will be satisfied from stock, no catalogues need to be consulted before requests are despatched. Indeed, if the collection were very comprehensive, access to the holdings of other libraries might be so rarely needed as not to be worth providing, but this is unlikely to be the case.

Even where a loan centre does not have a large collection, it can still serve as the principal channel for the receipt of requests if it maintains the main union catalogues of the holdings of other libraries, and if these catalogues are unpublished. It can then either redirect the requests to the libraries listed as holding them, or return them to the requesting library marked with locations, to which application can then be made direct. The latter alternative combines centralized and decentralized access for the same requests. It is apparently slower, but gives the requesting library much more control over the progress of its requests, including the ability to pursue urgent requests by special means.

One strong argument for centralization of access is that it permits routine monitoring of requests. This is important if deficiencies in the system are to be detected, and is very difficult to achieve with decentralized access.

ii. Partly centralized access can be achieved with Model B, whereby provision is concentrated on two or three libraries to which requests can be sent direct. Alternatively, one of the libraries in question can receive all requests and transmit where appropriate to the others.

iii. Decentralized access is necessary with Models C and D unless a national interlending centre maintains unpublished union catalogues and requests are sent there. With Model C, planned decentralized provision, it would be more usual to send most requests direct to the specializing library. If the allocation of provision is precise enough, union catalogues may be unnecessary or reduced to a supporting role.

With Model D, union catalogues are essential. As explained above, these may be maintained by a centre to which all requests are sent. Alternatives are published union catalogues which enable libraries to send requests direct to locations listed; and on-line access to computerized union catalogues, which can achieve the same result.

Union catalogues may thus perform a small supporting role to a central lending collection, in which case they may contain the holdings (possibly selected) of a limited number of selected libraries; or they may be maintained in unpublished form by a centre; or they may be published; or they may, if automated, be consulted on-line.

Published union catalogues can be very expensive. Frequent publication of a complete updated catalogue is likely to be prohibitively costly. The issue of supplements can alleviate this problem, at the expense of ease of consultation. If publication is infrequent, its value declines because many wanted items will not be found in it. Published catalogues can of course be produced from computer files which are continuously updated; this method makes more frequent publication (possibly on Computer Output Microform) possible than with manual systems, and also makes it possible to consult on-line the entries added since the last published issue. A further refinement possible with automated systems is the recording of items by standard book number; the published catalogue need then contain only ISBN and location codes, and the cost of maintenance and publication is dramatically reduced. One main example of ISBN catalogues is the regional union lists in the United Kingdom.

Most interlending systems will probably use different approaches for different forms of material. Serials lend themselves more readily to published union catalogues, which will become out of date less frequently than union catalogues of monographs because most recent volumes wanted will belong to serials that started some years ago and are therefore recorded in the lists. However, since it is much easier to set up central lending collections for serials, union catalogues may be less necessary, or they can be reduced to a minimal supporting role. Union catalogues of monographs are both more necessary and less easy to maintain.

One major problem with union catalogues, apart from their cost, is that they are soon out of date, not merely because new entries have not been recorded but because entries for lost or discarded books have not been withdrawn. Automation can aid speedy recording by entering items into the file quickly, but the removal of dead entries and locations is mainly in the hands of cooperating libraries.

A different problem with union catalogues is that unless there is strong central control, they can proliferate in an uncoordinated way, with overlap in contents, undesirable gaps, confusion on the part of contributing libraries and, above all, difficulty and waste of time for user libraries, both in selecting which catalogues to search and in having to search several, probably with rather different styles of entry and filing. There may be good reasons for separate union catalogues, for example for books published before a certain date (which may require fuller entries), for items in oriental languages, or in small localities in which same-day access is possible. However, there should be as few catalogues as possible, and these should all be planned, rather than allowed to develop independently, with standard forms of entry and with the overall aim of facilitating both the contribution of entries by cooperating libraries and consultation by user libraries.

Where requests are checked against union catalogues, and hence where the costs of checking are incurred, depends of course on whether the union catalogues are published or not. Unpublished union catalogues transfer checking costs from local libraries to a centre, but they may slightly reduce these costs because the staff of the centre will have greater familiarity with the catalogues. .

If the centre that holds the main union catalogues has a central loan stock, requests for appropriate material should be directed there first, to maximize use of the stock. When the union catalogues are unpublished, this is hardly avoidable; a similar result can be attempted by means of published or on-line catalogues if the loan stock copy always appears first in the holdings recorded.

It was argued earlier that centralized access permitted routine monitoring of requests, and that such monitoring was difficult to achieve otherwise. However, with on-line requesting systems, by which requests are transmitted on-line to libraries identified as locations, it would be possible for the computer to record the requests and perhaps even whether or not they were satisfied, thus providing automatic monitoring. For this to be effective, however, all or most libraries would need to be on-line to one another, and this seems at present a rather distant prospect.

6.2 National or regional (sub-national)

Lending systems can be organized as single national systems, or on a regional basis within the country, with each region having its own more or less independent system. Regional systems may be considered appropriate in several circumstances:

a) In a country with a federal constitution, which gives each state or province a great deal of autonomy (eg Federal Republic of Germany).

b) In a very large country with problems of communication over long distances, so that regional schemes may reduce supply times. However, the difference is unlikely to be more than a day or two unless communications are very bad, nor are savings due to proximity likely to approach the costs of operating several schemes rather than one.

c) In a country where loss rates in transmission are significant, and alternative and more secure means of transport are sought. In such cases local interlending systems, making the use of road transport possible, are more likely to reduce the problem than systems based on large regions.

d) In a country where different languages or cultures exist in different regions; an example is Yugoslavia.

e) In a country where the volume of interlending demand is very high, and library provision is plentiful. There may be a fear of overload on a single system, and the probability that interloan requests will be satisfied within a region is high. The USA is such a country; there are numerous interlending schemes within states (eg. NYSILL, MINITEX) and in regions.

In some countries, two or three of these considerations apply; the USA, for example, is a very large federal country with a high volume of demand and plentiful library provision.

Political factors may well override other considerations, but it would appear that where regional systems do not already exist, a very strong case would need to be made for establishing them, especially in developing countries where resources are scarce. The probability of requests being satisfied within a region is unlikely to be very high, and the constant movement of requests between regions is time-consuming and uneconomic. There is also bound to be considerable duplication of resources between regions; some of this may be reasonable and indeed desirable, but some will be wasteful and divert money that could be spent on additional resources.

Regional decentralized systems require union catalogues. If these are not integrated also in a national catalogue, locating items at the national level is time-consuming; while if they are integrated, very strong central control is required to ensure that duplicate entries are submitted by libraries or passed on by regional union catalogues.

Where regional systems do exist, their relationship to one another and to any nationwide system has to be considered. Coordination between regional systems can, if strong enough, help to reduce unnecessary duplication and increase the total resources available, but the problems of maintaining such coordination are severe and the costs may be high. Where there is also a national system as well, it can act as a backstop, dealing with the requests that the regional systems cannot supply (see 6.3, Hierarchical nature). Alternatively, some kinds of requests (eg, for common, recent or native publications) may go to regional systems and some direct to the national system. Much must depend on the reasons why regional systems exist at all; where, for example, there are separate cultures and languages regional systems may operate more or less autonomously.

No decision should be made to set up a national lending system on the basis of regional systems until the relevant factors have been carefully studied: the relative costs of provision and of access, the relative satisfaction levels, and the relative speeds of supply. A study of the volume, nature and geographical distribution of demand should be carried out as part of this analysis.

6.3 Hierarchical nature

There can be hierarchy of provision, and hierarchy of access; the two are closely related. Hierarchical provision can take several forms, with a national lending collection either at the apex or at the base. Thus, a national lending collection can be comprehensive, or cater only for demand that cannot be satisfied by, say, regional collections aiming to satisfy a given percentage of regional demand. Since, for example, a residual national collection would be used as a last resort after regional collections or systems, or whatever other systems existed to take the bulk of demand, hierarchy of access would be implicit in this particular form of hierarchical provision. A comprehensive national lending collection, however, could be used either as a first resort or a last resort; and since the decision affects radically the use made of other parts of the system, and of course of the national collection itself, the whole system should be planned in the light of this decision. A decision that the national collection should be used as a first resort may mean that the remaining parts of the system have a merely supportive role; if on the other hand it is to be used as a last resort, the other parts must be robust enough to carry the majority of loan demands.

It should be noted that provision can be multi-level without being hierarchical. A hierarchy implies a pyramid; in a multi-level system levels can be of the same or varying sizes, and the shape of the whole system may not be important. Thus a country can have a central loan collection and regional systems and an unplanned decentralized system coexisting but not hierarchically related. This was the position in the United Kingdom until a few years ago, and still is to a large extent, although the existence and growth of the upper level of the central collection have led to changes in the other systems in the direction of a hierarchy.

An interesting recent example of a hierarchical provision and access system is the US plan for a National Periodicals Center and its place in the total system. The loan collection is to be as comprehensive as possible, and is to serve as second, or intermediate, resource between local (regional) or state systems (first resort) and major archival collection (last resort). This order of access could obviously be varied, with the national collection as either first or, much less satisfactorily, last resort.

A rigid hierarchy of access, in which requests have to go through various levels in a prescribed order, can be slow because many requests may not be met at the first level. This applies particularly if the first level is the 'lowest' rather than the 'highest' - a situation that can occur when the 'lowest' is, or appears to be, faster. The words 'appears to be' were added deliberately. Whether the cost is in fact lower depends not only on the relative cost per request at each level, but on the proportion of requests that have to be passed to higher levels, since these incur costs that may be almost double. The same applies to speed; even if the lower level is in fact faster when it is successful, the average speed may be less if more than a certain proportion of requests have to be passed to the higher levels. (It may nevertheless be decided as a matter of policy that fast satisfaction for many and slow satisfaction for some is better than medium-speed satisfaction for all). The best solution is probably to have a recognized hierarchy of access which is not rigidly imposed, so that libraries can bypass 'first' levels to gain access to upper levels where higher probability of satisfaction or higher speed is important.

Where there is a dedicated central loan collection, it is probably wise to use it as the first resort in nearly all cases, because it is or should be uniquely geared to give a fast service, and because the heavy costs of central loan provision can be better justified if the volume of demand received is high (thus giving low unit costs). The decision is less easy with central loan collections that are combined with a national reference collection, or when provision is concentrated on a few libraries. Because they have other, and probably prior, responsibilities, it would seem wiser to use them as second or third resorts. However, if they do not normally lend out journals to their own users they should be able to discharge adequately both reference and lending responsibilities for journals by photocopying; and where loans are unavoidable, as in the case of most monographs, carefully planned duplication will alleviate the problem. Much will depend on the total volume of demand.

6.4 Unity of provision to all libraries.

Interlending systems can be designed to serve only one or two kinds of library, or to be available to all. It is not uncommon for public and academic libraries to have separate systems; this is the case in Sweden, for example. There may be administrative reasons for this;

for example, academic and public libraries may be funded from different parts of the public purse, or one category of library may be publicly funded and not the other. Another reason may be that libraries of the same kind are likely to be able to serve one another better than libraries of different kinds; even where there is a single system, books wanted by public libraries tend to be borrowed from public libraries, and so on. There may be a fear that any published union catalogue could become excessively large if it included a large amount of low-level* material such as many public libraries are bound to have; also, academic libraries are much less likely to discard material than public libraries, so that a union catalogue of the contents of academic libraries has a greater permanence. Further, academic libraries may be more cautious about lending material for the use of non-academic readers.

Whether any or all of these reasons are sufficient to justify separate systems is open to doubt. Where separate systems exist, it is essential that links should exist between them, since while it may be true that most books wanted by academic readers are likely to be found in other academic libraries, simply because of the general similarity between their contents recourse will often be necessary to other types of library. Switching requests between systems causes further delay, especially if the systems are organized in different ways. Links can be achieved either through centres for each system, or simply by the requesting library turning to the other system when its own fails.

It is noteworthy that while academic and public libraries sometimes have separate interlending systems, special libraries rarely have, except sometimes on a very local basis. So far as the meagre data allow any judgment to be made, special libraries in many countries (though certainly not in the UK) appear to account for a remarkably small proportion of interlibrary loan demand - remarkable because many of these libraries are very small and cannot possibly approach self-sufficiency. It seems probable that, as in the USA, many of them rely heavily on local academic libraries, which may act as agents in sending on requests they cannot themselves satisfy.

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* 'Level' is used not as a measure of value or ultimate worth, but of research or academic interest.

With unplanned decentralized interlending systems, some division between different types of library may be understandable, if only to avoid excessively bulky union catalogues. Otherwise, although there may be good historical reasons for separate systems, there would seem to be no very good case for setting up such systems deliberately; it is hard to see any advantages in doing so, and inevitably there will be much avoidable overlap of provision. Certainly it would be very hard to justify either separate central loan collections or separate systems of concentration on a few libraries.

With planned decentralization, different types of library may have different roles to play (eg. public libraries for books of a lower intellectual level or for national imprints, academic libraries for works of a higher level or for foreign imprints), but they can still be part of the same system; indeed, in the case of the examples above in parentheses, it is essential that they should be part of the same system, since neither would be able to stand alone. As noted above, switching requests between systems causes delay; and overall monitoring of demand and supply, to ensure adequate performance and remedy deficiencies, is more difficult to achieve with divided systems.

6.5 Unity of provision for all types of literature

Literature can be categorized by subject, language (or language group), date, or form. It should be noted that some forms are easier to provide for on interlibrary loan than others. Serials present least problems, partly because articles in them can be photocopied. As has been noted, however, provision for loans must also be made, since a proportion (certainly more than 10%) of serials requested are not amenable to photocopying, because of illustrations or because whole issues are required. At the other extreme, some types of non-print document, such as recordings on disc and tape-slide productions, are costly to pack and transmit, and have to be checked on return; they may also be produced in only a few copies, so that acquisition is more difficult and more care has to be taken to prevent damage or loss.

Different provision models allow for more or less flexibility.

Model A. Central loan collections can aim to cover all material, or can be limited in various ways: by subject coverage, eg. to science and technology; by language coverage, eg. national imprints only, or works in the language of the country; by date, eg. post-1950 publications only; or by form of material, eg. serials only. The issue is related to the one discussed above, whether central collections should concentrate on material in high demand (eg. science, journals, recent publications) or on material less likely to be provided in other libraries (eg. older publications, report literature, material in less common languages) - and is of course related also to the question of hierarchy of provision, ie. whether the collection is intended to serve as a first or last or intermediate resort. A central collection that was intended to serve as a first resort for a high proportion of requests but that was restricted in funds or accommodation would undoubtedly need to concentrate first on recent scientific and technological journals published in the most developed countries. Such a collection would of course need to be supported by other types of provision (Model AC or AD).

A special problem with a dedicated loan collection (though not with a loan collection combined with an existing national reference collection) is that of coverage of older publications. The problem can be reduced, though not entirely solved, if the loan collection serves also as a national repository for books withdrawn from other libraries, which will be able gradually to enrich its holdings of older material. Since in any case it is important that material other libraries can no longer accommodate is not lost entirely to the country, some arrangements for ensuring that withdrawn material is placed where it can subsequently be made available are most desirable.

Model B. Concentration on a few libraries would quite probably be based on some specialization in the first place; eg. one of the libraries involved might be a national science library. Between them, however, the selected libraries would be expected to cover most subjects, languages, dates and forms, leaving perhaps a few marginal areas (eg. oriental languages) to other libraries (Model BC or BD).

Model C. Any planned decentralized system, whether or not specialization is superimposed, would surely be designed to provide coverage of most if not all types of material, though it might be supported by unplanned decentralization in fringe areas.

Model D. By definition, unplanned decentralization has to accept what already exists in libraries, so that the question of limiting the system to certain types of material does not arise. It is of course highly likely that provision will be stronger in some areas than in others, and when Model D occurs in combination with Model A or B, it may in practice be used mainly for certain types of material.

As pointed out above, it is easier to justify central loan collections for certain types of material - scientific and technological, in common languages, recent and journals. For this reason, if for no other, mixed Models AC and AD may be attractive.

7. FACTORS TELLING AGAINST EFFICIENT NATIONAL INTERLENDING SYSTEMS

A rather different approach to interlending systems from that of identifying models is to analyse factors that tell against efficient interlending, since the elimination or reduction of these factors would clearly do a great deal to improve interlending. To avoid unnecessary repetition of material covered in previous chapters, particularly the preceding one, this chapter is presented in summary form.

The requirements that an interlending system has to fulfil if it is to meet a high proportion of requests speedily and economically can be identified by examining factors associated with (1) failure to satisfy requests, (2) delays and (3) high costs. These are listed below, with comments on ways in which these factors can be eliminated or reduced.

7.1 Factors associated with failure to satisfy requests

a. Unavailability of requested item in the country

Can be reduced by cooperative acquisition schemes, or, more effectively, by comprehensive central loan collections. Central monitoring of demand is necessary to ensure that items required are acquired.

b. Inability to locate item

Can be reduced by effective and up to date union catalogues and by a well organized subject specialization scheme, and virtually eliminated in most cases by comprehensive central loan collections.

c. Item in use or otherwise unavailable at location when requested

A common cause of failure, especially for recent publications.

Can be reduced by more use of photocopies in place of loans, and further reduced by comprehensive central loan collections with multiple copies where required. Union catalogues with multiple locations can help to a limited extent, but copies may be in local use when needed. Central monitoring of demand is necessary to ensure that adequate numbers of copies of works are available.

d. Item not loanable (rare, fragile, needed for reference, recently acquired, etc.)

A fairly common cause of failure. Can be eliminated by comprehensive central loan collections for recent publications, but not for older publications, which can be made more available by copying (perhaps with national support).

7.2 Factors associated with delay

(i) At requesting library:

a. Inefficient internal procedures

Can be improved only by local administration.

b. Checking of requests

A particular problem in smaller libraries with limited bibliographical resources. A national loan centre may do checking more effectively.

c. Selection of possible source of supply

Necessary with union catalogues with multiple locations, and with subject specialization schemes; not necessary with comprehensive central loan collection, or with centres to which all requests are directed.

d. Use of a variety of forms and procedures to make requests on different sources.

Can be reduced by cooperative action, or eliminated by comprehensive central loan collection or single loan centre.

(ii) In transmission:

e. Long distance

A real problem only when communications are poor (2f). Can be reduced by regional schemes. The location of any central loan collection must be carefully chosen - eg. geographically central or at hub of transport system.

f. Slow communications

Can sometimes be reduced by use of express or first class mail, or by use of rail and/or road transport; or by use of telex or computer for sending requests.

(iii) At supplying library:

g. Inefficient internal procedures

Due partly to the fact that systems in local libraries are primarily designed for local users. Can be eliminated by dedicated loan collection, and reduced if all requests go through a single centre.

h. Need to handle a variety of forms and procedures used by local libraries

Can be reduced by cooperative action, and eliminated by comprehensive central loan collection, or a centre to which all requests go.

i. Requests with inadequate information

See 2b above. A major cause of delay and frustration, especially if requests have to be returned to the requesting library. A centre with large bibliographical resources can identify some inadequate references, and some may be found in a central loan collection without further checking.

j. Failure to supply

A very serious cause of delay, as it necessitates repeated requests. Can be reduced by comprehensive central loan collection, or by limited central collection supported by selected other sources.

7.3 Factors associated with high cost

a. Inefficient internal procedures

In the supplying library, can be reduced by dedicated loan collections.

b. Variety of forms and procedures

Can be reduced by cooperative action, or eliminated by comprehensive central loan collection.

c. Checking of inadequate or inaccurate requests

Can be very time-consuming - see 2b and 2i above,

d. Selection of possible source of supply

Not necessary with comprehensive central loan collection. Reduced if all requests go to one centre, but the centre may still have to select.

e. Need to send requests to several sources

Not necessary with comprehensive central loan collection or with national loan centres, but in the latter case much of the cost is transferred from the requesting library to the centre.

f. Need to make more than one application

Very expensive. Can be reduced with comprehensive central loan collections with multiple copies where required. Can also be reduced by the circulation of requests on a rota of locations, but this incurs other substantial costs.

g. Expensive transmission of request (eg. by telex)

Must be weighed against the extra speed of telex. Probably justified only with a large volume of requests or when speed is of paramount importance.

h. Expensive transmission of document

Can be greatly reduced by use of photocopies in place of loans (cost much less to send, and do not have to be returned). Can in some countries be reduced by use of more economic systems (eg. rail or road transport instead of postal service).

i. Reclaiming and accounting procedures*

Repayment is not always required - but in such cases the borrowing library has less incentive to use the interlending system economically, because borrowing may appear cheaper than acquisition when it is not in fact so. Administrative costs can be minimized by systems using prepaid coupons or deposit accounts, so that payment is not reclaimed or made individually by item. An alternative method of payment, which may be especially valuable for countries with currency difficulties, is the use of internationally acceptable Unesco book coupons. Where libraries are in balance, payment can be waived.

j. Union catalogues

Expensive to construct and maintain, although some of the costs may be 'hidden' in cooperating libraries. Can be reduced by reducing the need for union catalogues, and by rationalization (of coverage of libraries, or holdings, etc).

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* It should be noted that, in itself, repayment is irrelevant to the total cost of interlending, apart from the administrative costs involved; it is merely a question of the allocation of costs between the requesting and supplying library. In any case, where repayment is required, the amount involved is usually only ¼ or ⅓ of the total costs incurred by the borrowing library.

k. Provision of adequate document resources available for loan or photocopy

Any scheme for extending existing resources is expensive, and the more libraries involved in the scheme the more expensive it is likely to be; central provision should be cheaper than cooperative provision. Schemes for duplicating existing resources to provide better availability may be more expensive still (eg. dedicated loan collections; combined reference/loan collections are much less expensive).

The factors listed above are of course interrelated. Steps taken to reduce one problem could increase another, and improvements must be planned in the light of all the relevant factors. However, improvements in some aspects are independent of others - for example, increased efficiency in requesting libraries (2a); and some improvements in other aspects can be made without reference to wider issues - for example, photocopies can be more extensively used (3h). Even within existing interlending systems, substantial improvements are possible.

It is obvious that the factors listed vary widely in their importance. Importance will vary from country to country - for example, unavailability of items at locations (1c) may be a much more significant factor in some countries than unwillingness to loan (1d) and a much less significant factor in others. Factors which may appear minor, such as those associated with procedures (eg. 2 a,c,d,g,h; 3 a,b,d,e) may on examination be found to play a much larger role than suspected. No attempt is made here to weight factors according to importance, because of the probable local variations. It is however suggested that a detailed study might be undertaken in several countries to identify the most important causes of failure to supply, delay and high cost, both so that local action can be taken and so that the results from the different countries can be compared.

For the day-to-day business of transaction of interlibrary loan requests, comprehensive, preferably dedicated, central loan collections can evidently do much more to reduce or eliminate weaknesses than any other expedient. However, the last factor of all, the very high cost of such collections (3k), may be of overwhelming significance.

8. OTHER ASPECTS OF INTERLENDING SYSTEMS

8.1 Relationship of national interlending systems to those of other countries

Any or all of the models described may be affected by the interlending systems in neighbouring countries. Neighbouring systems that are capable of giving a good service beyond their boundaries may make it possible to aim at a lower level of national self-sufficiency, and if they offer a fast supply they may affect a decision whether to concentrate provision on one or a few libraries, or indeed whether to concentrate it at all. For example, a very efficient central loan collection in a neighbouring country may make a similar collection unnecessary, so that emphasis can be placed on the support systems (Model C or D) or perhaps on Model B. (If Sweden set up a comprehensive loan collection, it is doubtful if Norway, Denmark or Finland would also need such collections).

Other types of system than Model A in neighbouring countries are less likely to affect basic system decisions, because libraries abroad that carry out interlending as a marginal activity could easily be overwhelmed by substantial additional demand. System design could however be affected marginally, for example by the existence in a neighbouring country of very strong specialist collections in certain areas. The precise extent to which reliance - permanent reliance, as far as can reasonably be predicted - can be placed on other countries must be determined before it is decided to reduce local provision below the level set as an aim; both the willingness and ability of the neighbouring system, not merely to serve present needs but possibly to handle large increases in demands, must be established. It is suggested that great caution is desirable before substantial reliance is placed on other countries, and then perhaps only as a short-term solution before greater national self-sufficiency is attained.

The above comments refer to neighbouring countries, but the same considerations apply *a fortiori* to more distant countries. In the immediate future, developing countries are bound to depend, probably heavily, on the interlending systems of some developed countries, and this dependence may be economic and satisfactory in the short term. But the ultimate aim must be to attain an optimal level of self-sufficiency, for economic if for no other reasons.

8.2 Relationship of national interlending systems to national acquisitions programmes

It has been apparent that national interlending systems cannot be considered separately from national acquisition programmes. Where no such programme exists, the interlending system has to take this into account, and should be either based on Model D (insofar as this can be called a system) or planned as Model A. Where there is a strong acquisition programme, as is implicit in Model C, the basic interlending system may be built on it, or the acquisition programme may be used as a basis for a supporting system to Model A or B.

Alternatively, an acquisition programme can be ignored, and a Model A or B constructed (though selected libraries in Model B may in fact be especially strong elements in a national acquisition programme). Conversely, with a Model A central loan collection a national acquisition programme may be rejected as unnecessary or reduced to a supporting role for marginal areas, depending on the coverage of the central collection. With Model AC, the central collection may be one element in a national acquisition programme.

Where strong national acquisition programmes already exist, but do not adequately serve or support interlending, should they be adjusted, or even radically changed, to do so? The answer is surely Yes, since the main aim of a national acquisition programme must be to ensure that a wide range of material is nationally available. The mere existence of material in various libraries is only of limited value, and in fact a programme cannot be said to be 'strong' if it cannot make the material acquired nationally available. Strength must lie not only in acquisition but in availability. It seems probable that some national acquisition programmes have not taken this essential factor sufficiently into account.

8.3 Relationship of national interlending systems to national repository programmes

As with national acquisition programmes, the questions of national interlending systems and national repository (or 'book retirement') programmes need to be considered together. In several countries the inability of local libraries to provide adequate accommodation for their growing collections is causing serious concern, and in some countries plans are being made to 'retire' less used material.* In the past, much material has been withdrawn from libraries and effectively lost to the nation, because there has been no obvious place to send it.

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*In some other countries, overcrowded libraries are unable to withdraw unwanted material because their stock is regarded as a capital asset that must not be eroded.

A common solution to this problem is to have a national exchange system whereby unwanted material can be taken up by other libraries, or sent abroad; but such systems do not and cannot ensure that the items in question are taken up or permanently retained, still less that they are readily available for subsequent loan if required.

Recently, there has been a tendency in some countries to designate certain libraries as repositories to which withdrawn material can be sent. These may be libraries specializing in the subjects concerned, or they may be purpose-built repositories. What seems clear is that the libraries to which such material is sent should be able to make it readily available, and that therefore they should be libraries forming part of the national interlending system. A Model A national loan collection (whether dedicated or shared), where it exists, is a natural recipient for material within its scope, and perhaps for other material as well, since a retirement scheme by which all withdrawn material is sent to one place is obviously simplest for all concerned (material it is offered but already possesses can be offered to other libraries). Model B, concentration on a few libraries, makes almost as simple a system possible. Model C, a system based on specialist collections, is considerably more complicated, depending on the number of libraries involved, the clearness of their subject or other boundaries, and their willingness and ability to ensure permanent retention. With Model D, any rational retirement programme is virtually impossible.

Any country planning a national retirement or repository programme should integrate it with the national lending system.

9. MECHANICS AND PROCEDURES OF INTERLENDING

This report is concerned with systems rather than procedures, and the following discussion of the mechanics and procedures of interlending is therefore conducted in general terms. A full discussion would require a detailed analysis of existing procedures in different countries in the light of their particular requirements. Since their requirements will depend to a large extent on the basic structure of their interlending systems, many of which this report suggests are in urgent need of radical revision and improvement, a detailed discussion of mechanics at this stage would in any case be premature.

9.1 The nature of interlending mechanics

By 'mechanics' are meant the various practical procedures involved in interlibrary lending. Some of these, such as methods of recording transactions, concern only the individual libraries involved. More important are the procedures that affect more than one library, such as the use and design of request forms. Even these will inevitably differ from country to country; for example, accounting requirements may make it necessary to keep records of transactions in a level of detail not otherwise needed, or to send receipts for items borrowed. Nevertheless it may be useful to specify the main elements likely to be common to interlending procedures in most countries, indicating those that affect both requesting and supplying libraries, and where relevant intermediate agencies such as union catalogue centres. Attention is also drawn to items of stationery used in interlending, since much of the effectiveness of interlending systems depends on the design and use of forms.

Below outline procedures are given both for requesting and supplying libraries. It should be emphasized that these procedures represent only approximate models: it is unlikely that in any one country they will be used precisely in the manner outlined. They are moreover oversimplified, and do not provide for by any means all the contingencies that can arise in interlending, especially with systems that allow for requests to circulate around libraries and systems in which many requests go through intermediate agencies. Nor is any provision made for payments or receipts. The procedures below therefore serve only as a kind of checklist.

An attempt has been made to use terms precisely and consistently, though the terminology used should not be regarded as definitive. The general point may be made that in each country terms used in interlending should be defined and standardized to ease communication between library and avoid misunderstanding.

A greatly simplified flowchart of the procedure through which an interlibrary loan request goes is provided as figure 3.

9.2 Basic interlending procedure for the requesting library

Items of stationery are numbered where they occur. Numbers preceded by 'R' refer to items of stationery that are used only in the requesting library: numbers preceded by 'N' refer to items used between libraries; and numbers preceded by 'S' refer to items used by the supplying library.

1. Receipt and checking of request

1.1 Receives request from user on local request form (R1)

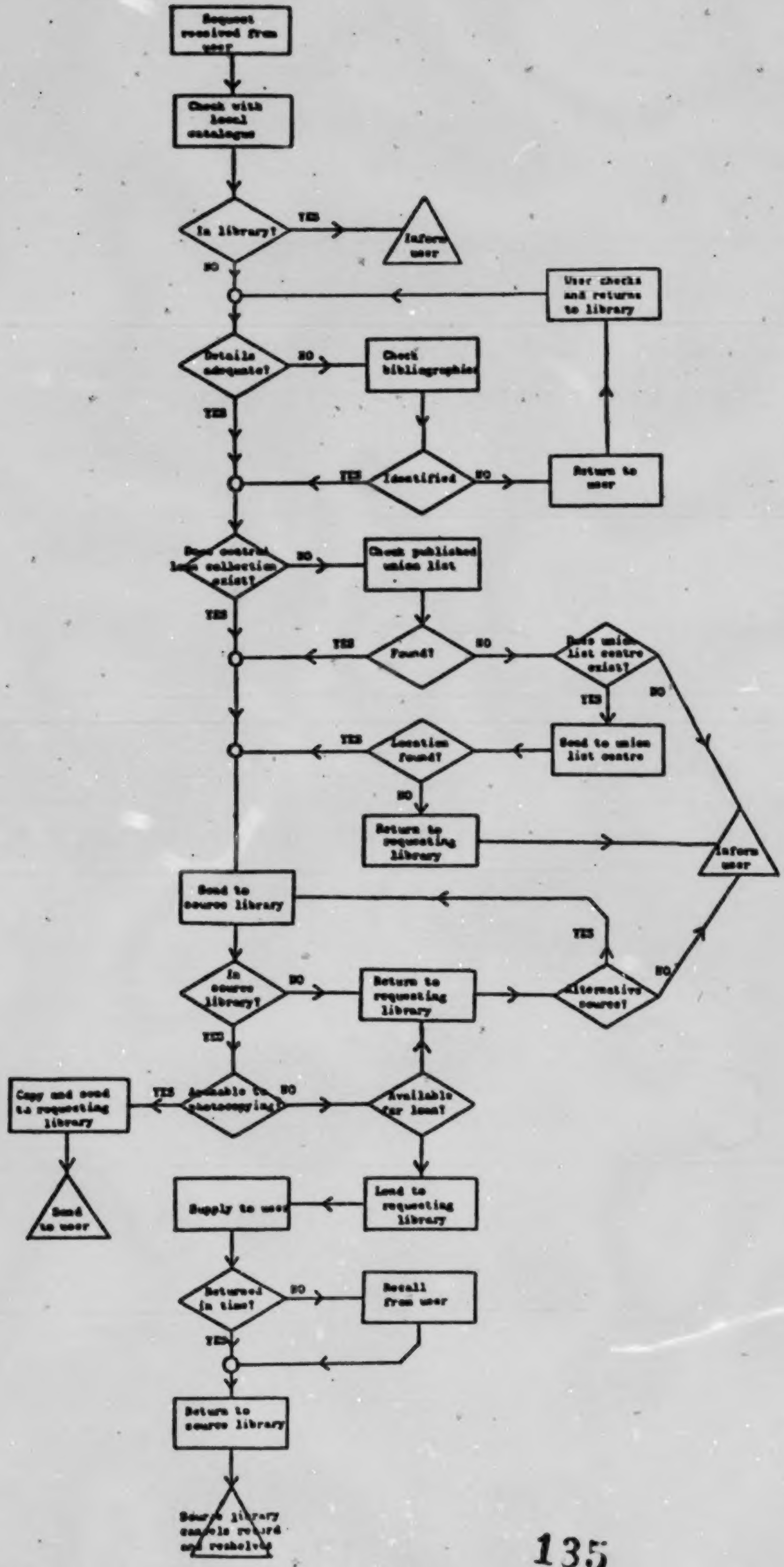
1.2 Checks request against catalogue:

if found, notifies user

if not found -

Figure 3

SIMPLIFIED FLOWCHART OF INTERLENDING PROCEDURE


Request received from user
Check with local catalogue
In library?
YES
Inform user
NO
User checks and returns to library
Details adequate?
NO
Check bibliographies
YES
Identified
YES
NO
Return to user
Does central loan collection exist?
NO
Check published union list
YES
Found?
YES
NO
Does union list centre exist?
NO
YES
Send to union list centre
Location found?
YES
NO
Return to requesting library
Inform user
Send to source library
YES
In source library?
NO
Return to requesting library
Alternative source?
NO
YES
Copy and send to requesting library
YES
Amenable to photocopying?
NO
Available for loan?
Send to user
Supply to user
Lend to requesting library
Returned in time?
NO
Recall from user
YES
Return to source library
Source library cancels record and reshelves

1.3 Checks request if necessary against bibliographies:

if not identified, asks user for more details (R2);

if identified -

1.4 Searches union catalogue, if available and relevant, to find location; or speculates as to likely location.

2. Despatch of request

2.1 Transcribes request on to ILL request form (N1)

2.2 Despatches request to potential supply source or intermediate agency with preaddressed label (R3) for supply of document

2.3 Files copy of request (copy of R1 or N1) so that it can be retrieved by details of document and by date of request.

3. Receipt of document or other communication

3.1.1(a) *either* Receives requested document (loan or photocopy) with (in case of loans) preaddressed label for return (S1) and date-for-return notice (S2)

3.1.1(b) Matches item with file copy of request (copy of R1 or N1)

3.1.1(c) Notifies user (R4) or sends direct in case of photocopy

3.1.1(d) Refiles file copy of request, together with preaddressed label, for retrieval by date of return and details of document (or of user) (in case of photocopy, file copy goes into 'completed' file)

3.1.2(a) *or* Receives request from supplying library for further details (N2)

3.1.2(b) Sends further details (N3), after asking user if necessary (R2)

3.1.3(a) or Receives notification of delay in supply (N4)

3.1.3(b) Notes delay on file copy of request, and notifies user if necessary (R5)

3.1.4(a) or Receives notification of failure to supply (N5)

3.1.4(b) Abandons request or Approaches another potential supply source or intermediate agency.

3.1.4(c) Notifies user (R6)

3.1.5(a) or Receives no notification after a given period

3.1.5(b) Reminds potential supply source (N6)

3.2 Requests extension of loan when necessary (N7)

3.3 Receives notice of renewal (N8) or recall (N9).

4. Return of document

(Not applicable to photocopies)

4.1 Recalls item from user (R7) if overdue or recalled (N9)

4.2 Receives document back from user

4.3 Extracts file copy of request (R1 or N1), notes date of return and removes to 'completed' file

4.4 Despatches document to supplying library, using preaddressed label (S1).

9.3 Basic interlending procedure for the supplying library

For numbering of items of stationery, see note under previous subsection.

1. Receipt and checking of request

1.1 Receives ILL request form from requesting library (N1)

1.2 Checks against holdings (catalogue and/or shelves)

1.3 Retrieves document if available

1.4 Photocopies wanted pages where appropriate and reshelves.

2. Despatch of document or other communication

2.1.1 either Despatches loan or photocopy to requesting library, using preaddressed label (R3), and in case of loans, enclosing preaddressed label for return (S1) and date-of-return notice (S2)

2.1.2 Records despatch on ILL request form (N1): in case of loans files by details of document and/or date of return; in case of photocopies, files in 'completed' file

2.2.1 or Asks requesting library for further details (N2)

2.2.2 On receipt of further details (N3) proceeds as above (1.2, 1.3, 2.1)

2.3.1 or Notifies requesting library of delay in supply (N4)

2.3.2 Adds request to waiting list

2.3.3 When ready, proceeds as above (1.2, 1.3, 2.1)

2.4.1 or Notifies requesting library of failure to supply (N5) or if appropriate, passes request to another potential supply source.

3. Return of document

(Not applicable to photocopies)

3.1 Deals with request for extension of loan (if any) (N7)

3.2 Checks file for overdues

3.3 Recalls if overdue or if wanted by another user or library (N9)

3.4 Receives document back from requesting library

3.5 Matches with ILL request form (N1), which is filed in 'completed' file.

9.4. Stationery used in interlending

By careful design of basic forms in multiple copies reproduced by carbon paper, and by the preparation of several suitably worded standard notices, the amount of writing or typing (and rewriting or retyping) is reduced to a minimum. It should however be stressed that the basic forms must be designed with multiple functions in mind, otherwise the result is likely to be an overcrowded and very detailed form that is difficult to use.

All stationery that is used for sending material relevant to interlending through the post (eg. address labels, envelopes, etc) should be clearly labelled INTERLIBRARY LOANS. 'URGENT' stamps or stickers can be added in appropriate cases (eg. urgent recalls).

The following lists of stationery relate to the outline procedures above, and are not necessarily comprehensive - nor may all of them be essential in a particular system. They illustrate how requirements can be met with a relatively small number of forms and notices.

9.4 (a) Items of stationery used between libraries (N)

N1. ILL request form

This is by far the most important item of stationery, and its design critically affects the efficiency of interlending procedures. In theory it could be combined with R1, the local request form, but the difficulties of combining the various functions of the two forms in one item of stationery are much greater than any advantage gained therefrom. The main use of the ILL request form is of course to request documents from other libraries.

It must therefore satisfy the requirements of supplying libraries and perhaps intermediate agencies also. It must contain provision for details of the document requested, the supply source's name and address, the date for return, and the requesting library's name and address; this last information can, if the form is well designed, take the form of a detached address label. The form must be capable of filing (by the supplying library) by details of document and date of return. It should contain a serial number for reference purposes.

A copy of the form may be sent with the document to the requesting library to facilitate matching with the local request form (R1) and to indicate (though this can be done equally well by quoting the serial number of the form) the date for return (S2). Copies of the form may also be used, if necessary, with attachments:-

(a) by the potential supply source:

for requesting further details from the requesting library (N2)
for notification of delay in supply (N4)
for notification of failure to supply (N5)
for notification of extension of loan (N8)
for recall if overdue or wanted by another library (N9).

(b) by the requesting library:

for sending further details as requested (N3)
for reminding the potential supply source (N6)
for requesting extension of loan (N7).

N2. Request for further details from requesting library

N3. Sending of further details

N4. Notification of delay in supply

N5. Notification of failure to supply

N6. Reminder to potential supply source

N7. Request for extension of loan

N8. Notification of extension of loan

N9. Recall from requesting library.

These can all take the form of separate items of stationery, but this requires the transcription of details of the request, and it is preferable to use the ILL request form (N1) with suitably worded standard notices (eg. 'Please supply further details') which can be attached to copies of N1 or photocopied alongside it. The addresses on the form can then be used in a window envelope. A well-designed form can in fact incorporate some of the above without the need for standard notices: for example the British Library Lending Division request form (Figure 4) incorporates provision for N4 and N5 as well as R3 and S2. Figure 5 illustrates the use of standard notices.

The form may also have to be capable of being rerouted in systems where requests are circulated round a rota of libraries. Information such as source of reference may be needed, and space may be provided for such requirements as 'microfilm acceptable'.

9.4 (b) Items of stationery used by the requesting library (R)

R1. Local request form

Must contain details of document and user's name and address; must be capable of filing by date of request, details of document and date for return.

May also be used:

(a) to ask user for further details (R2)

(b) to notify user of receipt (R3)

(c) to notify user of delay in supply (R4)

(d) to notify user of failure to supply (R5)

(e) to recall from user (R6)

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Figure 4

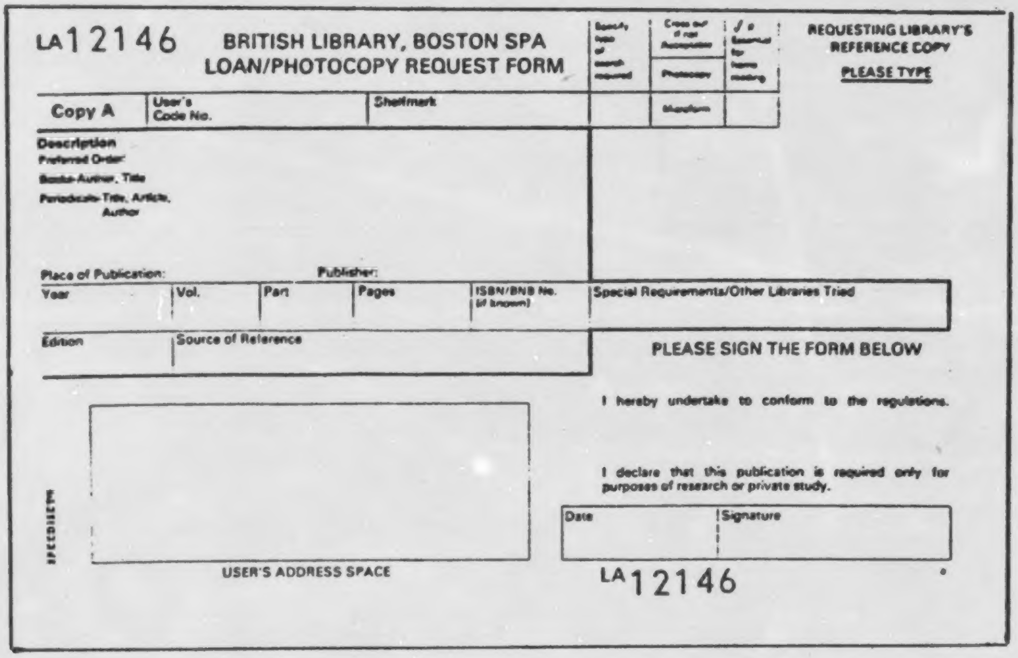
THE INTERLENDING FORM USED BY THE BRITISH LIBRARY LENDING DIVISION.

NB Illustrations are ½ actual size.

The form is in three parts, separated by carbon paper. The versos of Parts A and B are blank.

Figure 4a

Copy A: Retained by requesting library as file copy.



LA12146 **BRITISH LIBRARY, BOSTON SPA**
LOAN/PHOTOCOPY REQUEST FORM

Photocopy

Microform

REQUESTING LIBRARY'S REFERENCE COPY

PLEASE TYPE

Copy A

User's Code No.

Shelfmark

Description
Preferred Order:
Books-Author, Title
Periodicals-Title, Article, Author

Place of Publication:

Publisher:

Year	Vol.	Part	Pages	ISBN/BNB No. (if known)	Special Requirements/Other Libraries Tried
Edition	Source of Reference				

PLEASE SIGN THE FORM BELOW

I hereby undertake to conform to the regulations.

I declare that this publication is required only for purposes of research or private study.

Date	Signature

USER'S ADDRESS SPACE

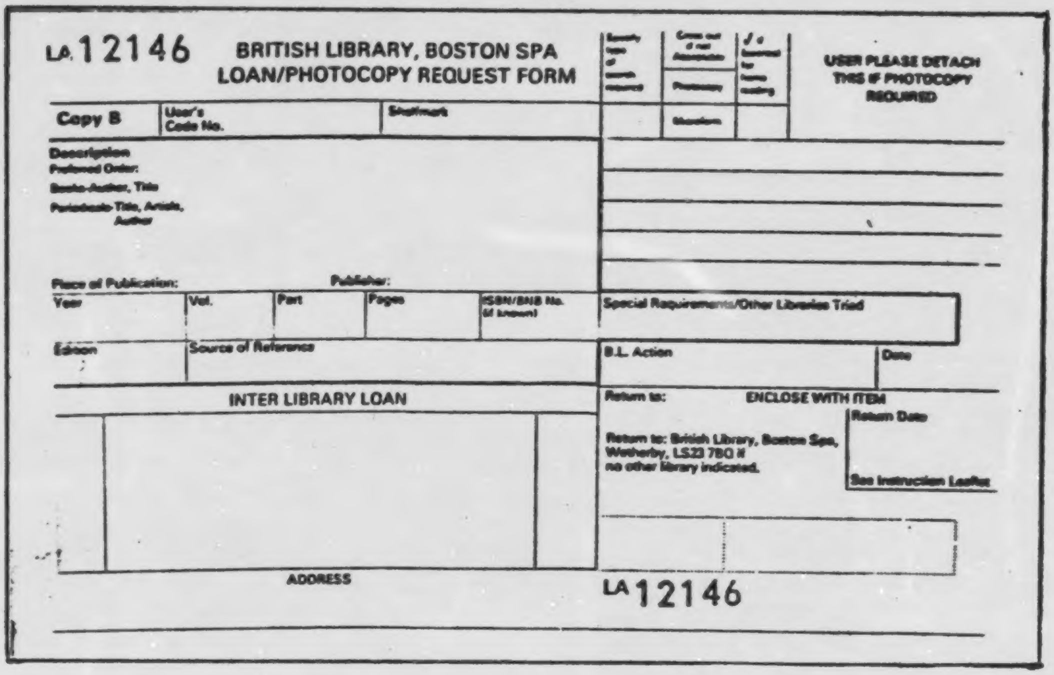
SPECIMEN

LA12146

Figure 4b

Copy B: Sent (with Copy C) to British Library Lending Division or other source library.

Filed (with Copy C) by Lending Division in the place of the item lent, or returned (with Copy C) to requesting library when Lending Division does not have the item (locations are added to the form when found), or when there is already a waiting list for the item.



LA 12146

BRITISH LIBRARY, BOSTON SPA
LOAN/PHOTOCOPY REQUEST FORM

Photocopy
Microform

USER PLEASE DETACH
THIS IF PHOTOCOPY
REQUIRED

Copy B
User's Code No.
Shelfmark

Description
Preferred Order:
Books-Author, Title
Periodicals-Title, Article, Author

Place of Publication:
Publisher:

Year
Vol.
Part
Pages
ISBN/BNB No. (if known)

Special Requirements/Other Libraries Tried

Edition
Source of Reference

B.L. Action
Date

INTER LIBRARY LOAN

Return to:
ENCLOSE WITH ITEM
Return Date

Return to: British Library, Boston Spa,
Wetherby, LS23 7BQ if
no other library indicated.

See Instruction Leaflet

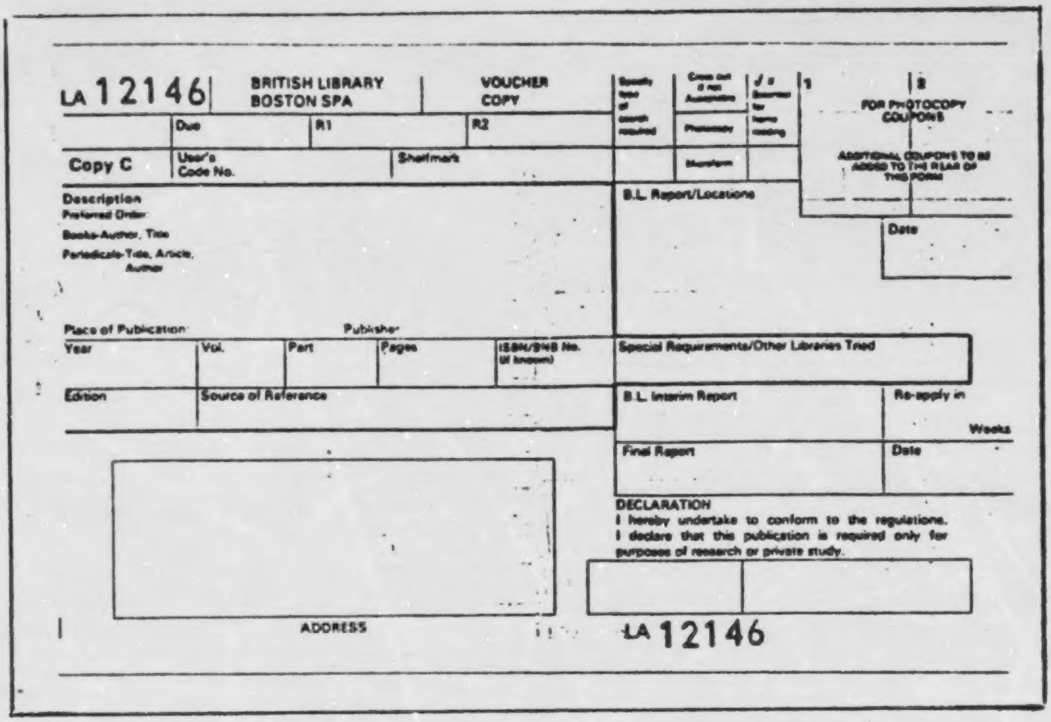
ADDRESS

LA 12146

Figure 4c

Copy C: Sent (with Copy B) to British Library Lending Division or other source library.

(1) Recto:



LA 12146

BRITISH LIBRARY
BOSTON SPA

VOUCHER
COPY

Specify type of search required

Cross out if not Acceptable

Photocopy

Microform

✓ if Required for home reading

1

2

FOR PHOTOCOPY COUPONS

ADDITIONAL COUPONS TO BE ADDED TO THE REAR OF THIS FORM

Due

R1

R2

Copy C

User's Code No.

Shelfmark

Description
Preferred Order
Books-Author, Title
Periodicals-Title, Article, Author

B.L. Report/Locations

Date

Place of Publication

Publisher

Year

Vol.

Part

Pages

ISBN/BNB No. (if known)

Special Requirements/Other Libraries Tried

Edition

Source of Reference

B.L. Interim Report

Re-apply in Weeks

Final Report

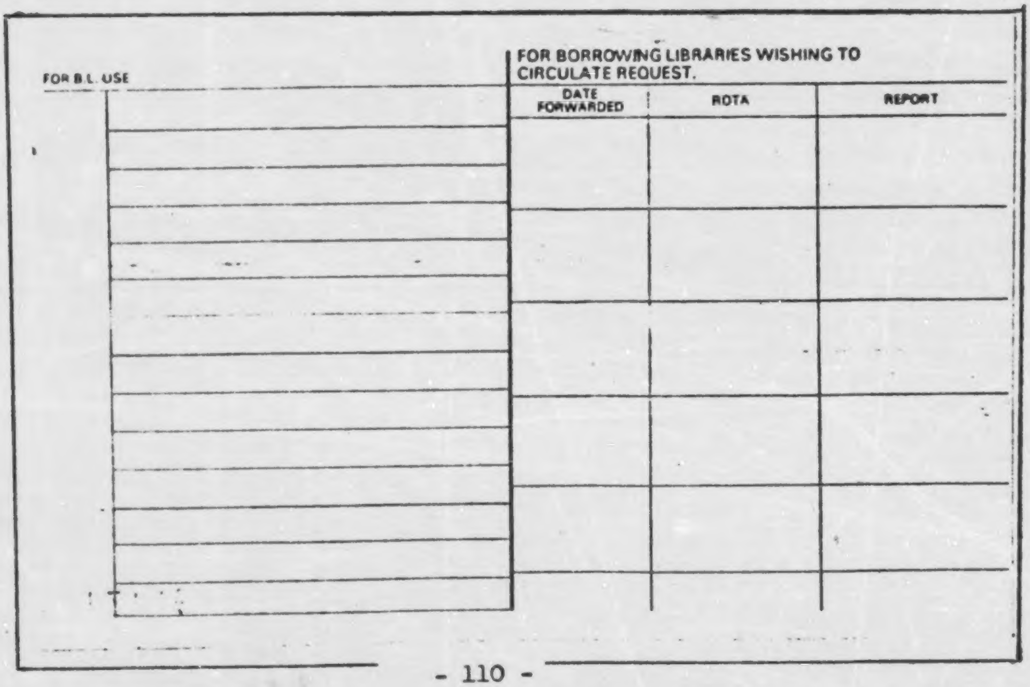
Date

ADDRESS

DECLARATION
I hereby undertake to conform to the regulations.
I declare that this publication is required only for purposes of research or private study.

LA 12146

(2) Verso:



FOR B.L. USE

FOR BORROWING LIBRARIES WISHING TO CIRCULATE REQUEST.

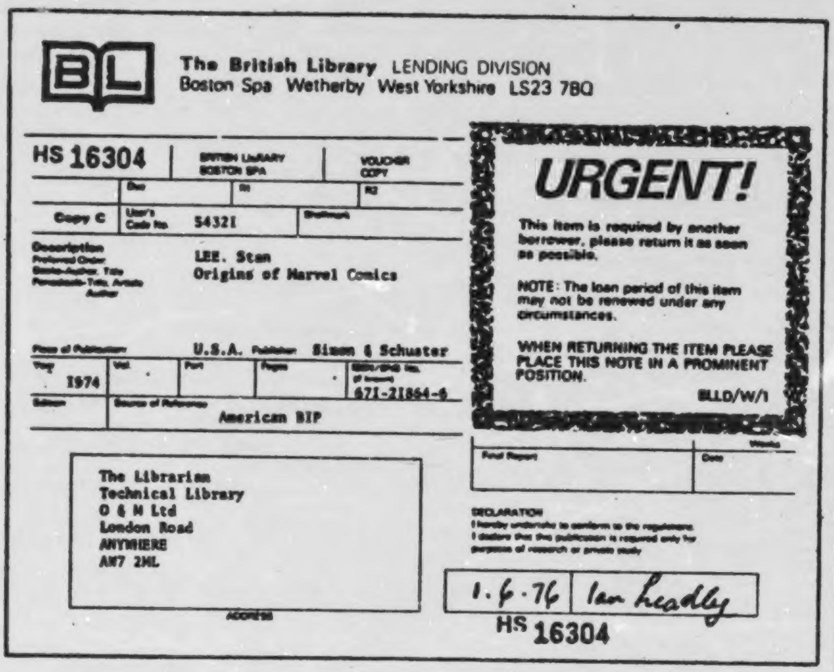
DATE FORWARDED	ROTA	REPORT

Figure 5

OTHER INTERLENDING STATIONERY USED BY THE BRITISH LIBRARY LENDING DIVISION

The items illustrated are only examples of the stationery used. They are shown as they are actually used, ie attached to a copy of the request form (as in (b), (c)) or photocopied together with the request form (as in (a)).

Figure 5a. Recall of item wanted by another library



The British Library LENDING DIVISION
Boston Spa Wetherby West Yorkshire LS23 7BQ

HS 16304
BRITISH LIBRARY BOSTON SPA
VOUCHER COPY

Copy C
User's Code No. 54321

Description
LEE. Stan
Origins of Marvel Comics

Place of Publication U.S.A. Publisher Simon & Schuster
Year 1974
ISBN/BNB No. (if known) 671-21864-6
Source of Reference American BIP

The Librarian
Technical Library
O & M Ltd
London Road
ANYWHERE
AN7 2ML

ADDRESS

URGENT!

This item is required by another borrower, please return it as soon as possible.

NOTE: The loan period of this item may not be renewed under any circumstances.

WHEN RETURNING THE ITEM PLEASE PLACE THIS NOTE IN A PROMINENT POSITION.

BLLD/W/1

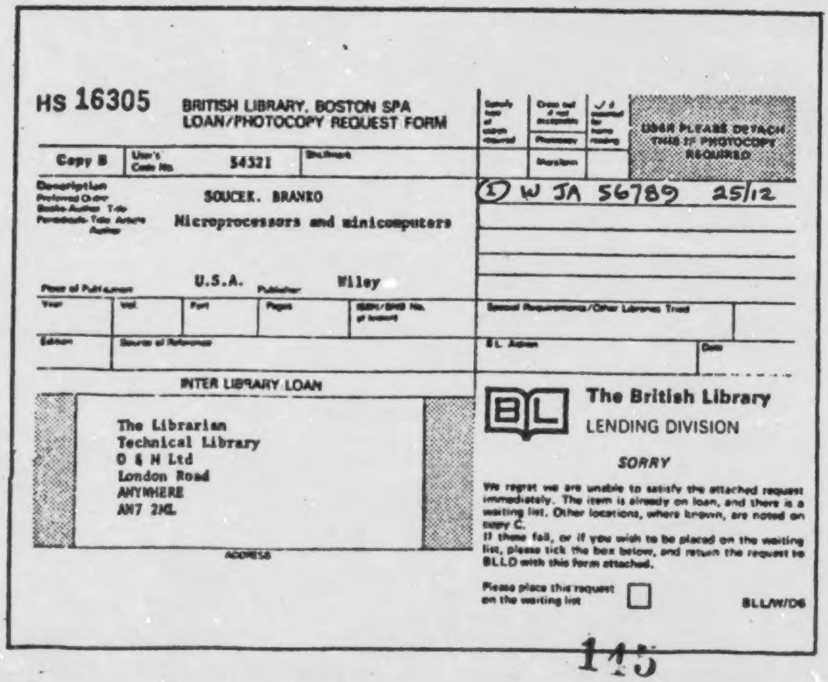
Final Report
Date

DECLARATION
I hereby undertake to conform to the regulations.
I declare that the publication is required only for purposes of research or private study

1.6.76 Ian Headley

HS 16304

Figure 5b. Notification to requesting library of delay because item is on waiting list.



HS 16305 BRITISH LIBRARY, BOSTON SPA
LOAN/PHOTOCOPY REQUEST FORM

USER PLEASE DETACH THIS IF PHOTOCOPY REQUIRED

Copy B
User's Code No. 54321

Description
SOUCEK. BRANKO
Microprocessors and minicomputers

Place of Publication U.S.A. Publisher Wiley

① W JA 56789 25/12

Year
Vol.
Part
Pages
ISBN/BNB No. (if known)
Edition
Source of Reference
Special Requirements/Other Libraries Tried
BL Action
Date

INTER LIBRARY LOAN

The Librarian
Technical Library
O & M Ltd
London Road
ANYWHERE
AN7 2ML

ADDRESS

The British Library
LENDING DIVISION

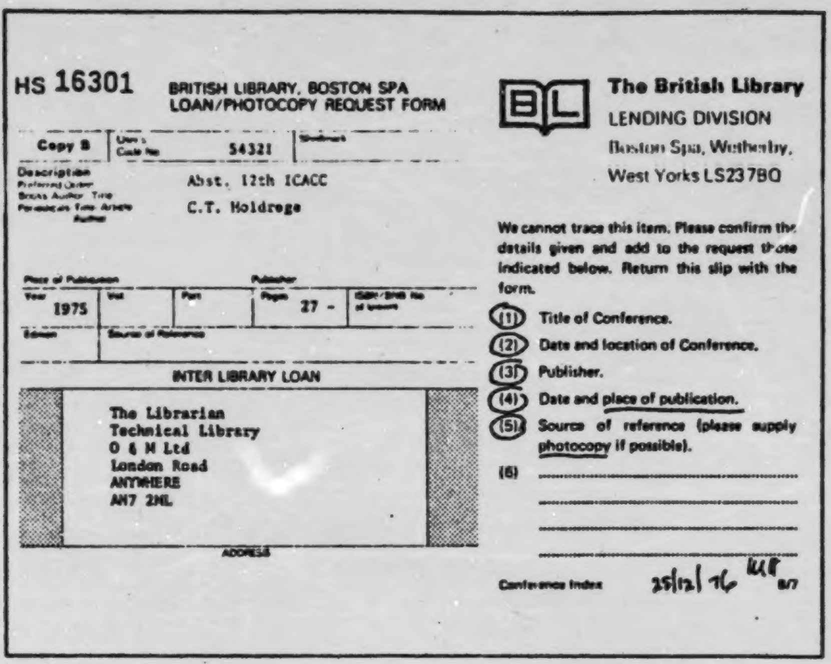
SORRY

We regret we are unable to satisfy the attached request immediately. The item is already on loan, and there is a waiting list. Other locations, where known, are noted on copy C.
If these fail, or if you wish to be placed on the waiting list, please tick the box below, and return the request to BLLD with this form attached.

Please place this request on the waiting list ☐

BLL/W/D6

Figure 5c. Request for further details



HS 16301 BRITISH LIBRARY, BOSTON SPA
LOAN/PHOTOCOPY REQUEST FORM

Copy B	User's Code No 54321	

Description

Abst, 12th ICACC

C.T. Holdrege

1975			27 -	

INTER LIBRARY LOAN

The Librarian
Technical Library
O & M Ltd
London Road
ANYWHERE
AN7 2NL

ADDRESS

The British Library
LENDING DIVISION
Boston Spa, Wetherby,
West Yorks LS23 7BQ

We cannot trace this item. Please confirm the details given and add to the request those indicated below. Return this slip with the form.

[✓ (1)] Title of Conference.
[✓ (2)] Date and location of Conference.
[✓ (3)] Publisher.
[✓ (4)] Date and place of publication.
[✓ (5)] Source of reference (please supply photocopy if possible).
(6) ....

Conference Index 25/12/76 KLF 8/7

- either by copy of multiple copy form with attachment (eg. 'Please collect the attached item, which has now been received')

or by photocopying request form alongside appropriate message (eg. as above).

(In either case the user's name and address on the form can be used to insert in a window envelope).

R2. Request to user for further details

R4. Notification to user of arrival of document

R5. Notification to user of delay in supply

R6. Notification to user of failure to supply

R7. Recall of document from user.

These can all take the form of separate items of stationery on which details of the request and the user's name are transcribed, or preferably (as suggested under R1) as special notices with standard wording, to be attached to copies of the local request form (R1) or photocopied alongside it.

R3. Preaddressed label for supply of document

This can be a separate preprinted (or duplicated) adhesive label or (preferably) can form part of the ILL request form (N1).

9.4 (c) Items of stationery used by the supplying library (S)

S1. Preaddressed label for return of document

This label, which facilitates accurate addressing and return, is a separate preprinted (or duplicated) adhesive label.

S2. Date-of-return notice

This can either be a separate notice, or can form part of the ILL request form (N1) if this is despatched with the loan.

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10. CONCLUSIONS

10.1 The need for a systematic approach to interlending

There appears to be a need for considerable improvement, and sometimes for radical change, in the interlending systems of many developed countries, and an equal need for developing countries to build into their national library plans, as an integral element, effective interlending systems. National interlending systems should be an integral part of national information systems. They also form an essential contribution to the furtherance of Universal Availability of Publications, since unless documents are available within countries they cannot be made available either to the inhabitants of those countries or to other countries that lack them.

Without effective interlending, more and more publications wanted by users will prove unavailable or will not reach them in time. That existing interlending systems are showing signs of strain appears to be demonstrated by the plans for central loan stocks in the USA and France, and by vigorous discussion in other countries such as the Federal Republic of Germany; just as it was mainly the inadequacy of interlending systems in the UK in the 1950s that led to the creation of the National Lending Library for Science and Technology.

In few countries has interlending been regarded as an issue that requires detailed consideration in its own right, but the time for such consideration has, we believe, now come. Most countries have modified and improved practices, and designed new elements of interlending machinery from time to time, but they have not attempted to plan a total system in the light of an analysis of demands, needs and options. Indeed, for few countries can a ar and full picture be obtained of present practices and procedures, so t the situation can very rarely be seen as a whole, and it is by no means rtain that the most serious problems are being tackled. Too often the action to any deficiency that has been identified has been not to examine e system but to add more machinery or to devise special procedures to set the problem; for example, a special mechanism may be devised to provide fficial publications*, or a new union catalogue may be created to link ibraries in an area. These expedients may be useful, but they are partial. Common deficiencies in interlending systems are low satisfaction rates, especially for recent publications; slow speed of supply, a supply time of less than two weeks being exceptional; cumbersome, time-consuming and staff-intensive procedures; and, probably, high hidden costs. These characteristics, separately or in combination, constrain demand, which would otherwise quite possibly overwhelm the system and force change. It is our belief that substantial, and sometimes dramatic, improvements could be achieved without very large expenditure and indeed with substantial long-term savings. We believe that the approach to interlending adopted in this study is as important as its proposals and conclusions.

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* The 'Convention concerning the exchange of official publications and government documents between States adopted by the General Conference (of Unesco) at its Tenth Session, Paris, 3rd December 1958' allows the transmission of such documents to be made directly to recipients named by the exchange authorities and facilitates their acquisition. However, acquisition and exchange are by no means always possible alternatives to interlending, with which the present study is concerned.

10.2 Main characteristics of basic models

Using the models in Chapter 6 as a basis, we now consider which types of model may be most appropriate for particular situations. It is necessary however to emphasize at the outset that each country is unique, and its circumstances (see Chapter 3) must be studied individually if the best solution is to be found. In developing countries in particular, it is necessary to build on strength where real strength exists. The following suggestions should be regarded as indicators rather than firm proposals.

Model A. A dedicated centralized collection clearly has great advantages over other systems, provided it is organized efficiently. Because it is designed specifically for interlending, it can optimize its procedures and give a fast service from its own stock. Providing its coverage within different categories of material is comprehensive enough, the probability of satisfaction is high. However, several reservations must be made. In the first place, efficiency is hard to guarantee; there may moreover be some dangers in over-much centralization. Secondly, the cost of setting up and maintaining dedicated centralized collections is very high. Even if centralization can be economically justified in the long run, the costs in the first and subsequent years may be prohibitive. The money required is unlikely to be available in developing countries, and even in developed countries demand has to be very large to justify the expenditure. On cost factors alone, comprehensive dedicated centralized loan collections seem to be justifiable only in large developed countries with a substantial volume of demand. Even in these, some support, in the form of planned or unplanned decentralization, is necessary.

However, there may well be a strong case for partial centralized collections, dealing with limited categories of material, and perhaps also aiming at only 70% or 80% satisfaction rates within those categories. Such a collection for scientific and technological journals could perhaps handle as much as 50% of all demand in many countries, and its costs would not be excessive. The case for such limited centralized collections is all the stronger because the main need for speed appears to be for scientific and technological journals.

The location of any centralized collection should be carefully planned to optimize supply. This does not imply that it must be in the geographical centre of the country, still less in the capital, but it must be well situated for transport and supply routes.

Where a dedicated centralized collection is strong, support in the form of unplanned decentralization (Model D) is probably adequate, depending on the quantity and quality of other library collections in the country. Where the central collection is partial or less strong, planned decentralization (Model C) is desirable to support it.

An acceptable alternative in some circumstances to a dedicated central collection is a central loan collection shared with a national reference collection. Most countries have national libraries, and others are being created in developing countries. It is not easy to superimpose a lending function on a long-established reference collection, because of the modifications in its practices that are required, but when a national library is young or is in process of creation there seems no valid reason why it should not be designed as a combined loan and reference collection.

Little addition is needed to the resources it will need for reference to give an adequate lending service, and the interlending burden on other libraries can be greatly lightened. The solution commends itself both where research and development are fairly highly concentrated in one place (so that consultation is possible), and where researchers are scattered (and so unlikely to have adequate local provision). It would seem to be a particularly attractive solution for developing countries with limited resources.

As with dedicated central collections, shared central collections need to be supported by planned or unplanned decentralized systems. Initially in developing countries, demand may be slight, but the system must be designed so that it can handle more demand when it comes, as is certain to happen. Indeed, when demand reaches a certain level, the central collection may need to be used as a second rather than a first resort if its reference function is not to be hampered.

National libraries are usually, almost by definition, comprehensive in coverage, so that the question of partial provision is less important than with dedicated central collections. However, it should be noted that the supply of photocopies, which obviates the need for items to leave the premises, is considerably easier to reconcile with a reference function than the loan of original items.

Model B. Concentration on a few libraries can be seen as a cheaper alternative to a central collection, if a few libraries can be identified as holding a large proportion of items likely to be wanted in the country. Such a situation is most likely to occur in smaller developed countries, where it is not uncommon to find two or three large, possible subject-specialized, libraries that contain a very high proportion of all the titles held in the country. Little or no addition need be made to the provision they already make, and the volume of demand is not likely, at least in a smaller country, to be so large as to overwhelm them. What is however required is a radical change in orientation, and quite probably some change in procedures, since it is very doubtful if interlending can be tacked on to existing functions effectively. Whether such changes can actually be introduced could only be established by practical experimentation, but it must be pointed out that the probable alternative is either an inefficient lending system or much greater expenditure on a dedicated collection.

There is another major requirement if the solution is to be fully workable: the selected libraries must be paid for the costs they incur in supplying items to other libraries. Payment may be made either by the Government, which might otherwise have to spend much larger sums on a dedicated service, or may be recovered from payment by contributing libraries for each transaction. Any system of payment must be carefully designed to be as simple as possible, if considerable administrative costs are not to be incurred.

Although this solution is suggested as a possible one for smaller developed countries, it may also be suitable for some developing countries with a very small number of research centres with strong libraries, for example in medicine, technology and the social sciences. Where such centres exist but do not have strong libraries, their collections may be worth strengthening, as an alternative to adding lending functions to the national reference collection. Much must depend on the existing situation, for example whether a national collection of any strength exists or is planned.

Model C. Planned decentralization, which can be seen as a diluted form of Model B, may be suitable for some large developed countries that already have a sound basis for it; the Federal Republic of Germany is an example of such a country, where it would seem wasteful to plan a dedicated loan collection so long as the decentralized system works well. This model may also be appropriate for some developing countries with a moderate number of research institutions with existing good collections and with no obvious central collection on which to build. In most circumstances, however, Model C would appear to be inferior to Model B, except as a supporting system for Model A or Model B.

Model D. Unplanned decentralization is by definition not a system that would be planned to give an efficient interlending service. It is almost impossible to improve significantly, and the hidden costs of operating it are likely to be much higher than with alternative solutions. It may however serve as a useful support for strong Models A or B.

10.3 Other factors affecting choice of system

Union catalogues are essential for access to more than 2 or 3 libraries, and will undoubtedly form a permanent part of future interlending systems, whether unpublished, published, or accessible on-line. They need however to be carefully designed if they are to be effective and efficient. In particular, they should not be allowed to proliferate: the more union catalogues there are, the more difficult it is for the libraries using them. Comprehensiveness of coverage of libraries is much less important than optimal coverage of titles, which may be contained in a relatively small number of libraries in the country. While within limited localities small union catalogues may be desirable and useful, regional union catalogues should not be encouraged, and at a national level there should be firm central coordination and control over union catalogues.

Automation clearly has a lot to offer union catalogues, in construction and maintenance, and possibly in use as well. Every opportunity should be taken when planning or reorganizing union catalogues to take advantage of automation.

Published union catalogues have a number of advantages, including the possibility of direct access to holdings of other libraries, but they also incur high costs, are never up-to-date, and make it almost impossible to monitor interlending and thus identify and remedy deficiencies in the system. The concentration of unpublished union catalogues in a centre to which most or all requests have to be directed may, provided the centre is efficient, be more cost-effective. More cost-effective still may be on-line access, which combines central control and monitoring with direct access to the holdings of other libraries.

Regionalization of interlending systems, while historically understandable, seems undesirable except in special circumstances, such as large federal states. Any benefits in speedier transportation seem likely to be outweighed by the need to switch a large number of requests between regions and by the costs of maintaining separate union catalogues with a high degree of overlap and probably poor central control.

Provision for all types of recorded knowledge is clearly an essential aim of the total system. However, different systems may be more effective for different categories; as already explained, Model A may be a very effective solution for scientific journals, but not for other forms of material. Strong central coordination is necessary to ensure that all forms of material are in fact available on interlibrary loan.

Hierarchies of provision or of access will exist with mixed models. A recognized order of requesting seems desirable, but this should not be rigidly imposed on libraries, which should be able to by-pass lower levels in order to obtain items quickly from higher levels in cases of urgency.

10.4 Two possible models for a developing country

With diffidence, we suggest two possible models that might be appropriate for a developing country.

The percentages given are for a system that has been developed over 10 years or more but that has not reached full maturity. They add up to 60% in both models; the aim after 20 years should be at least 70%.

Model 1

Serials. Central dedicated collection of 5,000 core science and technology titles, satisfying c. 50% of demand for serials and c. 33% of all demand. Specially organized to give a fast service, mainly by photocopies. Backed by humanities and social science serials in the national reference library (a further 5% of demand), again using photocopies as far as possible. Possibly supported also by selected specialist collections.

Other materials. Combined national reference/loan collection with adequate duplication of titles in heavy demand, satisfying c. 15% of all demand. Supported by unpublished union catalogues of selected (special or large general) libraries (c.7%). National library also serves as national interlending centre.

National imprints. Dedicated loan collection attached to national reference collection.

Requests to be sent in the first place to the scientific serials collection or the national library, which redirect them as necessary.

Model 2

Science and technology. Concentration on three or four specialist libraries in government-funded research centres, planned to provide between them at least 5,000 core serials (33%), all with fully adequate photocopying and other facilities needed to provide a good and speedy service, and with sufficient duplication of both serials and other materials to serve both local and distant users adequately; backed up by union lists of selected libraries (7%). Satisfying in total about 40% of all demand.

Humanities and social sciences. Combined national reference/loan collection, with adequate photocopying and other facilities. Supported by unpublished union catalogues of selected libraries. Satisfying in total about 20% of all demand. National library also serves as national interlending centre.

National imprints. Dedicated loan collection attached to national reference collection.

Requests to be sent in the first place to the appropriate specialist collection or the national library, which redirects them as necessary.

10.5 Obstacles to interlending

Some countries, especially developing countries, face serious obstacles in interlending. In some countries, for example, the head librarian of a library is personally liable for all books lent out: a severe enough inhibition to lending to local readers, and understandably a major barrier to lending to other libraries. Photocopying equipment, whether for direct hard copying or for microfilming, is sometimes very inadequate both in the number and in the quality of machines, so that the supply of articles by photocopy is slow, expensive and cumbersome. Often a serious shortage of foreign currency makes borrowing from other countries very difficult. The postal service may not only be slow but cause losses of documents in transit. Shortage of adequately trained staff may be another difficulty. Most of these problems are local to individual countries, and must be solved locally, but first the importance of solving them must be recognized.

A more general problem is copyright legislation; where copying fees have to be paid, high additional costs may be incurred, and where permission of the copyright owner has to be obtained, serious delays may result. Some way must be found of reconciling the legitimate interests of publishers, authors, libraries and users so that the communication of information by interlibrary transactions is not hindered.

10.6 Other aspects

10.6(a) Statistics. Before much improvement can be made to interlending in a country, the existing situation should be studied, to identify the likely volume and nature of interlending demand; and when a system is operating, its effectiveness and progress should be monitored by the regular collection of basic statistics. The data ideally desirable as a preliminary to systematic analysis are suggested in 'Principles of national interlending systems' prefacing this report (P1-4), but many countries may have to be content with less information. The basic statistics required for an initial study, and for regular monitoring, are:

volume of demand
form of document requested (monograph, serial, etc.)
source of supply
satisfaction level
speed of supply.

The statistics should be collected in a way that permits cross-tabulation, eg. speed of supply for different sources of supply.

10.6(b) The question of payment. The question of payment has been raised several times in this report. In the case of Model B, concentration of interlending demand on two or three existing large libraries, payment seems essential. Model A central collections may also recover at least part of their costs by charging libraries for each successful transaction; it is intended that the National Periodicals Center in the USA should, after the first two or three years of operation, recover all its costs.

Little is known about present practices of cost recovery within countries, although it is known that in many postal costs are reclaimed. Reclaiming separately for each transaction must be very wasteful in staff time for both the claiming and the paying library, and if payment is made some simpler method should be devised. The mechanics of payment are not discussed here, but we wish to make the point that payment is or may be integral to the interlending system, and that the principle and practice of payment need to be considered at an early stage in planning. In developed countries at any rate, it seems that most libraries would rather pay for an efficient service than have a less efficient, or inefficient, service 'free': the penalty for a 'free' system being all too often heavy hidden costs. There are good theoretical arguments for at least a certain degree of cost recovery, notably that it gives borrowing libraries more incentive to ensure that they are not borrowing what it would be more economic to buy. There are equally arguments against full cost recovery by a national loan collection, since one of its major justifications may be that it enables other libraries supported by public funds to economize.

10.6(c) Interlending centres. Whatever system is planned, there must be some centre. The role of the centre can be limited to the minimal but vital functions of coordination, monitoring and modification as required, and of serving as a national focal point for international transactions; or at the other extreme it may be a dedicated comprehensive lending library which deals with most of the interlending demand in the country. Between these extremes, it may maintain the main union catalogues of the country, and perhaps serve also as the channel through which most requests are directed. Since planning for interlending should be undertaken as part of national library planning, and, as has been pointed out, it is integral to national acquisition programmes, an interlending centre should be linked with, if not part of, any national library planning centre.

There is also a strong case for links with national bibliographic centres so that on-line document requesting can be more easily planned and implemented. A further function could be that of a national centre where rare or valuable materials can be reproduced so that loanable copies are available.

The precise role of an interlending centre will differ according to local circumstances and the type of interlending system adopted, but the one essential is that it should be a strong centre with real authority in the functions it is required to perform.

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

1. Interlending systems should be recognized as essential elements in national library and information systems, and as such should be built into national library and information planning.

2. Each country should endeavour to provide and make available a full account of its existing interlending practices.

3. Each country should conduct studies to measure its interlending performance, in terms of satisfaction rate, speed of supply, and cost. It should also identify and examine the factors that contribute most to failure to supply, delay and high cost.

4. A standard form for the collection of basic statistics of interlending should be designed and promulgated, to aid individual countries and to assist comparisons between countries.

5. Intensive studies should be carried out in a few developing countries to assess the present situation with regard to interlending and to consider the best system to meet their particular situations.

6. Every country, whatever its nature, should accept full responsibility for supplying its national imprints, by loan or photocopy, to its own population and to foreign countries. This is best achieved by central collections, which in most cases will be appropriately linked with the national library and built up by legal deposit.

7. So far as is possible and economic, interlending demand should be concentrated on as few libraries as possible. In large developed countries, a central loan collection may be justified; in smaller developed countries, concentration on two or three libraries should be considered. In both cases, support from other libraries is required. In developing countries, combined national reference/lending libraries should be seriously concerned; in some cases, concentration on a few or several research collections may be a possible solution.

8. For immediate improvement, short-term solutions may be necessary, but these should be planned so that they contribute towards rather than inhibit long-term solutions, which should be conceived at the same time.

9. Barriers to interlending should be identified in various countries, particularly developing countries, and every effort should be made to remove them.

10. Subsequent to decisions in various countries on the basic structure of interlending systems, studies should be conducted into the mechanics and procedures of interlending, with a view to designing optimal procedures that might be applicable in other countries.

11. The concept of core collections of journals, satisfying a high proportion of journal demand, should be studied by detailed statistical analyses in selected countries, with a view to establishing the number of titles required to satisfy given levels of demand, and the similarity of core collections in different countries.

12. For longer term development, a predictive study of various alternative future scenarios for the supply of documents within countries should be carried out, taking into account recent and likely advances in technology relevant to the production, storage, requesting and transmission of publicly available information.

13. A special study of the implications of copyright legislation for interlending is desirable, to seek solutions that take account of the legitimate interests of all parties concerned without constituting any barrier, in cost or in delay, to effective interlending.

PART TWO

INTERLENDING IN VARIOUS COUNTRIES OF THE WORLD

The information contained in these descriptions was obtained by a variety of methods from a number of sources. These include an extensive search of library literature, personal approaches to a number of individuals, and the use of information that has been collected over a period of time by the IFLA Office for International Lending. Much of the information in this last category has been gathered during visits to various countries by staff of the Office and of the British Library Lending Division. Apart from this, nearly all of this part was prepared by A.A. Briquet de Lemos.

It will be noted that much of the information was derived from the Western European Seminar on Library Interlending held at Banbury in England in 1973. The complete accuracy of such information and of information from older published sources can no longer be guaranteed. However, in many cases, the comprehensive literature search failed to reveal more up-to-date information. The currency of the information on each country is indicated by the date of the source of reference. The descriptions revised and brought up to date by authorities in several countries are separately identified.

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There is no structured system embracing all the libraries in the country.

Key libraries in the interior of the country are linked by Telex which is used for sending requests for copies of materials. The telex network was installed by the Consejo Nacional de Investigaciones Cientificas y Tecnicas (CONICET) in 1971, with an agreement with the eight most important national universities in libraries at Bahia Blanca, Cordoba, Corrientes, La Plata, Mendoza, Rosario, Santa Fe y Tucuman, and the head of the network is the Centro Argentino de Informacion Cientifica y Tecnologica (CAICYT), that depends on the CONICET. The Union Catalogue of Periodicals is maintained at CAICYT. Each node of the network conducts interlibrary lending at a local level, of requests for copies made to CAICYT, 60% are in person or by letter and 40% are by telex. It handles between 12,000 and 15,000 interlibrary loans a year.

Co-ordination of interlending in the University of Buenos Aires is effected by the Instituto Bibliotecologico of the University, which is responsible for the standardization of activities. In practice, the University libraries have direct connections for interlibrary lending.

Two sectorial networks should be mentioned, both within the University of Buenos Aires. The Faculty of Agronomia de la Universidad de Buenos Aires co-ordinates the agricultural libraries network and maintains relations with AGRINTER, AGRIS and CARIS. The National Information System for agricultural science has recently been created, sponsored by the Secretaria de Estado de Agricultura y Canaderia, the Instituto Nacional de Tecnologia Agropecuaria and with the support of the Instituto Interamericano de Ciencias Agricolas.

The library of the Facultad de Medicina co-ordinates the network of medical libraries and is linked to the Regional Library of Medicine of Sao Paulo which is maintained by the Pan American Health Organization and the Brazilian government.

Although data are not available for the whole country a recent study restricted to the region of Buenos Aires provides some relevant information on interlending. In this region, academic libraries are more inclined to participate in interlending than other libraries. About 75% of these libraries conduct transactions with other types of libraries. Considering that all the libraries of the University of Buenos Aires, whose holdings correspond to 94% of the resources available in academic libraries in the region, maintain an interlending service, and that 18% of the special libraries also provide this service, it is to be expected that access to library collections by library users of the region is relatively satisfactory.

Only 39% of all the libraries in the Buenos Aires region, however, maintain an interlending service on a continuing basis. Seventy per cent restrict the lending of materials to the region. The limited availability of copying equipment restricts the lending of materials; only 39% of the libraries in the region have reprographic equipment. Public libraries do not have access to such equipment, which is found in only 37% of the special libraries. Since 90% of the libraries of the University of Buenos Aires have copying equipment it is to be expected that they have to be responsible for a larger proportion of interlending.

The Instituto Bibliotecologico has prepared an interlibrary loan code which governs these activities in the University of Buenos Aires. There is another code for the other university libraries of the country which was drawn up by the Junta de Bibliotecas Universitarias Nacionales Argentinas (JUBIUNA). Bank libraries have their own interlibrary loan code.

An arrangement has been made with the national postal service that has approved a special label for the identification of parcels despatched on interlibrary loan.

In the study of Buenos Aires mentioned above it was found that some existing factors are likely to inhibit the development of interlending: fear of the loss of materials has resulted in increased postage costs since registered post is required, as well as the requirement that requesting libraries pay for the cost of photocopies or microfilms.

Union Catalogue:

Catalogo Colectivo de Publicaciones Periodicas existentes en bibliotecas cientificas argentinas, under CAICYT responsibility. The first edition appeared in 1942. The 2nd in 1962. In 1972 a supplement was published. The updating of the data for a new edition is in progress.

There is a union catalogue of books covering the holdings of the libraries of the University of Buenos Aires which is a possible basis for a regional catalogue.

Sources:

Cagnoli, Roberto V. El acceso a los materiales bibliograficos y la cooperacion bibliotecaria: la situacion de la ciudad de Buenos Aires. *Cuadernos de Bibliotecologia*, 1 (I y II), Diciembre 1976.

Personal communication from Cagnoli

FID/CLA folleto de difusion no. 20. Mexico, Febrero, 1977.

Gietz, R.A., Director CAICYT. Personal communication 24th February 1978.

AUSTRALIA

Requesting libraries apply directly to holding libraries by means of published union catalogues. Interlibrary loan is mostly free. There is an Interlibrary Loan Code prepared by the Australian Advisory Council on Bibliographical Services (AACOBS) which has been accepted by all major libraries.

Data available for the year 1971 indicate that 138,540 volumes were requested by different types of libraries. Twenty per cent of this was for monographs and 80% was for journal articles. The total percentage of periodical requests satisfied was 85.8% (81.2% from within Australia). The total percentage of monograph requests satisfied was 91% (89.5% from within Australia). The figures for serials show that 14% of the articles requested were not located and an additional 5% had to be sought overseas. The total percentage of all requests satisfied within Australia was 87%.

On average, 58% of requests for journals are satisfied in 5 days, 23% in 14 days and 5% in 47 days, corresponding, respectively, to items borrowed from the state in which the requesting library is located, from another state, and from abroad.

The same survey indicated that 61% of libraries eventually used the National Union Catalogue of Monographs (NUCOM) to locate materials, but only 9.3% did so as a first course of action. Twenty-three per cent of libraries did not seek up-to-date information from the Commonwealth Scientific and Industrial Research Organization (CSIRO) master file for locations of serials not found in the printed Scientific Serials in Australian Libraries (SSAL).

The survey report states:

'The CSIRO library system, several of the university libraries, and one or two State libraries have major collections of scientific and technological documents which have given them de facto roles as back-up suppliers of documents, by inter-library lending, to other libraries in Australia.' Regarding future developments in interlending, the Scientific and Technological Information Services Enquiry Committee recommended in 1973 that an hierarchical system for obtaining documents in Australia should be developed. Every library would have what copies it needed of those journals most useful for its clientele. These libraries would be supported by regional libraries which would also have those journals, together with those used fairly frequently within the region as a whole, but not regularly by individual libraries. In turn the regional libraries would be supported by the proposed national information authority which would supplement the regional resources and maintain a national collection that would also include the less frequently used journals, but for which nationally there would be enough use to justify the purchase of at least one copy. A similar pattern would operate for monographs and other materials. The creation of a central lending collection following the British pattern was suggested.

Location of materials is made through the following tools:

for monographs:

- the National Union Catalogue of Monographs (NUCOM) which is housed and maintained in the National Library of Australia; now published on microfilm.

for serials:

- Scientific Serials in Australian Libraries (SSAL).

It is housed and maintained in the central library of the Commonwealth Scientific and Industrial Research Organization (CSIRO). It is published in loose leaf form and it is up-dated every two years on average.

- Serials in Australian Libraries: Social Sciences and Humanities (SALSSAH).

It is housed and maintained by the National Library. In 1961 a two-volume edition was produced of SALSSAH. A loose leaf edition was started in 1964, and in 1974 the format changed from continuous updating to the issue of monthly supplementary lists of newly reported titles, cumulated three times year.

- Newspapers in Australian libraries - a union list. Compiled and published by the National Library.

Sources:

The STISEC report. Report to the Council of the National Library of Australia by the Scientific and Technological Information Services Enquiry Committee: May 1973. Canberra, National Library of Australia, 1973-1975. 2 v.

Parker, Joan. Co-operation between libraries and inter-library loans. Australian Special Libraries News, 8 (3), Sept. 1975, 95-101.

AUSTRIA

Requesting libraries apply directly to holding libraries. Location of materials is made by the directing library of the lending region, and if necessary by the central bureau of the Austrian National Library (Österreichische Nationalbibliothek). Details of practice are given in - Handbuch Österreichischer Bibliotheken. Bd.1. Bibliotheksverzeichnis Stand 1970 - Wien, 1971. (Biblos-Schriften, 62)

Loan regions coincide with the areas of local legal deposit.

Interlending is free of charge.

Location of materials is made through the following union catalogues:

for monographs

- Österreichische Büchernachweisstelle an der Österreichischen National bibliothek (Österreichischer Gesamtzuwachskatalog.) Located in the national library in Vienna. Includes the holdings of foreign monographs in some 50 academic libraries.

for serials

- ZAZ: Zentralkatalog neuerer ausländische Zeitschriften und Serien in Österreichischen Bibliotheken (union catalogue of new foreign periodicals and serials in Austrian libraries). Located in the national library. Covers all foreign periodicals and serials received after 1945 by some 40 co-operating libraries Vol.1-6, Supplements 1, 2. 1962-76. Supplements 1, 2 are Neue ausländische Periodica in Österreichnischen Bibliotheken (NAP). Vienna, 1968-76

Other union catalogues are maintained in certain regions of the country.

Source:

The interlibrary loans service of the Austrial libraries. Paper presented at the Western European Seminar on Library Interlending. Banbury, 10-15 March 1973.

Interlending between public libraries operates on an hierarchical basis, but a number of libraries by-pass this network. Scientific libraries tend not to lend books to public libraries. The Royal Library may lend material to major public libraries provided that they have facilities for reading on the premises.

Interlending between research libraries is not formally structured or organized. Each research library has its own methods for obtaining material on interlibrary loan. Libraries with an active interlending department often send some of their requests directly abroad.

A survey made by J. Van Borm estimates the volume of interlending as 300,000 requests per year costing in total around 90 million Belgian francs. The bigger libraries are in general net lenders, and the smaller ones are net borrowers. The Royal Library is the most important net lender with a borrowing-lending ratio of 1 : 18.5. It is followed by the libraries of the major universities such as Leuven, Ghent, Liege and Louvain.

The satisfaction rate for monographs is around 50%, but it may be less for medical books. The satisfaction rate for journal articles is between 80% and 85% which is explained by the availability of union catalogues of periodicals and the availability of photocopies from abroad.

Thirty five per cent of the requests issued by the University of Antwerp remain unanswered after their first circulation through the interlending rota. Twelve per cent of the requests do not even arrive at the issuing library after a period of two months. Five to six per cent of all requests never return to the library and just disappear. This proportion may rise to 45% for medical books.

Only a few libraries have a response time of one week to 10 days. Some libraries require three or four weeks on average to supply material. Considering the more favourable response time of foreign institutions, some Belgian libraries send their requests to Great Britain (British Library Lending Division) which has an average response time of 10-13 days, Holland (10-11 days) and Germany.

The marginal costs of an interloan transaction are estimated to be around 500 Belgian francs. This figure should be treated with care as no extensive studies have yet been made on the costs of interlending.

Books are sent without charge to the library or the user. Claims have already been made by net lending libraries for a certain form of cost recovery either by direct taxation to the lending library or by extra financing through the government. In most cases photocopies of journal articles are charged to the requesting library. As a general rule the library claims this charge from the user.

Requests for books and in many cases for periodical articles are circulated through several libraries before a location is found. There is no standard request form, but most if not all the public libraries use the IFLA form.

Requests are transmitted by post, Telex being increasingly used for international transmission. Books and photocopies are sent by post or train. A van courier service is maintained to collect books from some of the important research libraries on a weekly basis.

Union catalogues:

There is no national union catalogue of books. The union catalogue of periodicals does not cover Belgian journals.

For serials the following union catalogues are available:

Catalogue collectif belge et luxembourgeois des périodiques étrangers en cours de publication. Bruxelles, 1965.

It is supplemented by microcards available in the Service du Catalogue Collectif of the Bibliothèque Royale. This service is responsible for updating the catalogue and is preparing a new edition of the 1965 catalogue.

Union list of Russian scientific and technical periodicals available in European-libraries. Volume II. Belgian (2 parts). Amsterdam, 1967.

Répertoire des périodiques et grands traités de chimie et sciences connexes existant ans les bibliothèques de Belgique. Bruxelles, 1955.

Université de Louvain: Bibliothèque de la faculté de médecine. *Catalogue des périodiques*: 6th ed. Louvain, 1976

Catalogue des périodiques U.C.. Louvain. Louvain, 1977, (on microfiches).

Katholieke Universiteit Leuven: Universiteitsbibliotheek. *Lopende periodieken*, stand 1976. Leuven 1976.

Wille, E.
Centrale tijdschriftencatalogus van de Rijksuniversiteit te Gent. Gent, 1970, with supplement 1975.

Université de Liege.
Catalogue des périodiques. Liège, 1972-75, 4 vol.

Antilope: Antwerpse inventaris van lopende periodieken; 3rd ed. Antwerpen, 1977

Université Libre de Bruxelles: Bibliothèque.
Liste des périodiques en cours de publication qui y sont recus regulièrement. Bruxelles, 1964.

Catalogue des periodiques courants présents dans les bibliotheques universitaires belges et financés par le FNRS.
Katalogus van buitenlandse lopende tijdschriften aanwezig in de Belgische Universiteitsbibliotheken en gefinanceerd doc door het NFWO. Brussel, 1975.

Sources:

Van Borm, J. Director, University of Antwerp Library. Het interbibliothecair leenverkeer in de wetenschappelijke bibliotheken van Belgie: overzicht en evaluatie. *Bibliotheekgids*, 1977 (53), p.30-57.

Jacobs. E. *Rapport sur le prêt interbibliotheque à la Bibliothèque Royale Albert 1er, Bruxelles.* Paper presented at the Western European Seminar on Library Interlending. Banbury, 10-15 March 1973.

Ducarme, J.P. *Programmation de la politique scientifique.* Personal communication 16th March 1978.

BRAZIL

The Instituto Brasileiro de Informacao em Ciencia e Tecnologia (IBICT) maintains a computerized central union catalogue of periodicals of which printed lists have been published for science and technology and agriculture. The publication of other lists covering other subjects is being catered for. The union catalogue records the holdings of approximately 60,000 titles in 842 libraries.

Libraries borrow from other libraries through IBICT but the trend is towards direct requesting with the availability of the printed union lists. About 2,000 requests are received by IBICT every month, but about 90% of these requests have to be referred to other libraries in the country or abroad. IBICT does not maintain a representative collection of journals in science and technology. IBICT has signed agreements with eleven academic or research libraries which cover the different geographic regions and have extensive library collections. Some of these regional centres have Telex facilities which are used for sending requests.

In 1976, the IBICT union catalogue sent 11,570 requests to different libraries in Brazil (70%) and abroad (30%). The satisfaction rate was 64% (7,461 items). Of the 8,141 requests sent to Brazilian libraries 5,193 (64%) were satisfied and of the 3,429 requests sent to foreign libraries 2,268 (66%) were satisfied.

The average delay in satisfying requests at the eleven regional centres varies from 30 to 90 days. Two libraries are reported to satisfy requests in 30 days, seven libraries between 35 and 40 days, and two take 90 days on average.

Borrowing libraries have to use a standard request form provided by IBICT. Users are charged for the provision of the photocopies. Only copies are supplied, original documents are not loaned.

The system is said to work satisfactorily but the long delay in the supply of materials is a serious disadvantage. Some of the difficulties are within the

IBICT and result from the deficient service of the vehicle that collects the orginal journals from the libraries in Rio de Janeiro, postal.delays, delays in paying the libraries for the provision of copies of articles, etc. There are plans to replace the collecting of original documents in Rio by the immediate provision of copies by the lending libraries on a cost recovery basis.

The long delays in supplying copies by other libraries outside Rio vary according to the resources and facilities available in the lending libraries.

The response time from lending libraries abroad varies greatly and depends on the post or the need to make payment for copies in advance. Contacts have been made by some Brazilian embassies in countries which are more often used by IBICT in order to get preferential treatment from them for the despatch of materials to Brazil. The lending libraries in these countries have stated that the delays occur in the postal service. An experiment is being carried out by which copies will be sent to Brazil by diplomatic bag under the responsibility of the Sistema de Informacoes Cientificas e Tecnologicas do Exterior (SICTEX) which is operated by the Science and Technology Division of the Ministry of Foreign Affairs in Brasilia.

Other points are being considered in order to improve the service. They include the establishment of an improved request form, the strengthening of the Brazilian regional centres by means of financial resources in order to speed up their response time, and the identification of other collections that may contribute to the service.

The most important interlending service in operation in the country covers the health science libraries. They form an hierarchical Biomedical Information Network with local, regional, national and international levels, covering not only Brazil but the rest of Latin America. The international co-ordinating body which also holds the most important medical journals collection in the region is the Biblioteca Regional de Medicine (BIREME). This library is based on the holdings of a medical school library in Sao Paulo (Escola Paulista de Medicina) and is sponsored by the Pan American Health Organization, which is the regional office of the World Health Organization, the Brazilian government, the US National Library of Medicine, and international funding foundations.

The structure of this network is comparable to the Regional Medical Libraries Program in the USA with the difference that it covers more than one country.

In 1976 BIREME satisfied a total of 37,245 requests for copies of journal articles, 75% of which were satisfied from its own collection, 11% were supplied by other libraries of the regional network, and 14% were supplied by the US National Library of Medicine.

From January to July 1977 BIREME received 23,886 requests of which 21,804 were satisfied (91%). 65.7% of the requests received were from Brazilian libraries; these were followed by Venezuela (7.9%), Chile (7.4%), and Bolivia (6.7%).

Other important Interlending services are:

- Centro de Informacoes Nucleares of the Comissao Nacional de Energia Nuclear. It operates the INIS tapes and provides microfiches of non-conventional documents recorded in the INIS system. Periodicals have to be located through the national union catalogue operated by IBICT:

- Sistema Nacional de Informacao e Documentacao Agricolas of the Empresa Brasileira de Assistencia Tecnica e Extensao Rural. It is the national agency for the FAO AGRIS system and its document delivery service is similar to the one mentioned above for nuclear energy.

- The Biblioteca Nacional maintains a service which provides microfilms or photocopies of publications in its collection.

Union catalogues:

- Catalogo colectivo de publicacoes periodicas de ciencia e Tecnologia. Rio de Janeiro, Instituto Brasileiro de Bibliografia e Documentacao, 1971. 2v.

- Catalogo colectivo de publicacoes periodicas de ciencias agricolas. Rio de Janeiro, Instituto Brasileiro de Bibliografia e Documentacao, 1975.

Sources:

Personal communications received from staff members of the Biblioteca Nacional, IBICT and BIREME.

BULGARIA

Interlending was introduced in Bulgaria in 1951 at the Cyril and Methodius National Library which functions as a national centre for the control, co-ordination and methodical direction of domestic and international interlending.

Bulgaria is divided into four interlending areas. In each a regional library, which is a depository library, deals with the requests for Bulgarian publications from libraries of its region. Only requests that the regional libraries are unable to meet are passed on to subject libraries and to the Cyril and Methodius National Library.

Requests for foreign books and periodicals are directed to research and academic libraries likely to be in possession of the materials requested. This is facilitated by the use of union catalogues and accessions lists of newly acquired foreign materials.

Requests for foreign materials that are not available in any Bulgarian library are handled in the first place by the Cyril and Methodius National Library which acts as the national centre for requesting material from abroad. In addition, there is an international lending service at the Central Library of the Bulgarian Academy of Sciences. International lending follows the guidelines of IFLA and of a Bulgarian directive which takes account of Bulgarian library provision.

In theory any material may be lent to domestic and foreign libraries even though it may be available in the lending library in one copy only. There are, however certain categories that are excluded from interlending, e.g. textbooks, official publications, reference works, manuscripts, archival documents, old and rare books, bulky material, cartographic materials, and material that may only be used on the library premises. Single issues or volumes of periodicals may be lent (to domestic libraries only) if the lending library has no reprographic facilities. All materials lent are to be used in the reading rooms of the borrowing library and nowhere else.

Domestic interlending is free, but reprographic services are charged for as a matter of course.

Union catalogues:

The Cyril and Methodius National Library maintains a union card catalogue for foreign books acquired by major libraries in Bulgaria since 1944 and currently publishes the national union catalogue of foreign periodicals in major Bulgarian libraries (so far bibliographic coverage has been provided for the period 1900-1974). In addition, it publishes a monthly information bulletin of new foreign monograph accessions of major libraries. It appears in four series: A. Science and Technology; B. Medicine and Biology; C. Agriculture; D. Humanities and Social Sciences. Art. Finally, the regional libraries publish accessions lists of foreign literature acquired by the libraries in their regions.

Source:

Kalajdzieva, K. Director, Cyril and Methodius National Library. Personal communication. 28.11.1977.

CANADA

Interlending is decentralized and regulated by an Interlibrary Loan Code which was drawn up by the Canadian Library Association and the Association pour l'Avancement des Sciences et des Techniques de la Documentation. The present edition which is being revised in 1978 is based on the code of the American Library Association.

The National Library maintains the Canadian Union Catalogue. Requests for the location of items in libraries are received by Telex, mail, telephone and in person. In 1976/77 requests totalled over 151,000 for all types of material. In 1976/77 78% of such requests were located in Canadian libraries, but this percentage has risen as high as 80% in some years. The speed in satisfying requests for locations ranged from the same day to ten days and the average was between two and a half and five days.

Plans are being developed for the implementation of an on-line Canadian Union Catalogue which will start with a data base consisting of at least the cumulated MARC records produced by the Library of Congress and the National Library of Canada. The publication of the union catalogue in microform and its distribution to regional centres or libraries is being considered. It is expected that such measures should lower the response time for location requests from the current mean of two and a half days to a mean of less than 24 hours.

Being a decentralized system does not imply that no formal arrangements exist among Canadian libraries. In the majority of provinces public libraries are regionally organized, usually through the agency of the provincial government. There are consortia of academic libraries, and 65% of 352 sampled libraries in a survey conducted between March 1974 and March 1975 reported that they were participating in some form of consortium for collection sharing.

This survey has identified that 90% of loans made by libraries of one type are made to libraries of the same type plus libraries of three other types. For purposes of interlending, libraries fall into two kinds of informal networks: 1) university, college, government, special and national libraries, and 2) public, regional and provincial libraries. Net borrowers, that is, libraries which borrow more than lend, are the government, college and special libraries. Net lenders, that is, libraries which lend more than borrow are the national and university libraries.

Net lenders, the survey showed, tend to be those libraries which contribute to the union catalogues and it is mainly on the largest that large, medium and small libraries alike depend. The National Library of Canada and the Canada Institute for Scientific and Technical Information fill important roles as sources of interlibrary loans. The 1974/75 survey showed that the National Library was able to supply 32.7% of requests from its own collection and it was one of the largest net lenders in Canada. (The percentage for 1976/77 fell to about 25%).

The periodical, it was found, is the form of publication most frequently loaned and borrowed in technology, pure and life sciences. In humanities, the arts, and social sciences it is the monograph. Over 40% of the periodicals, government publications and theses exchanged on interlibrary loan were published in the five years prior to 1974/1975, and in the case of monographs nearly 30% were published in the same period.

The average cost to a lending library of supplying an item was estimated at about $8.00. The overall expenditure for the whole country for one year was estimated to be over 5 million dollars. By 1980 it is expected that a million volumes a year will be exchanged among Canadian libraries if there is no change in the present interlending system. The number of items loaned by those libraries most active in interlending in 1974/1975 seemed to be increasing by 10%-12% a year.

Recommendations have been made to implement some changes and reduce the informality of the present arrangements.

First, it has been recommended that the federal government, through an agency capable of making direct grants to or negotiating contracts with individual libraries, reimburse net lending libraries, other than national, provincial and government libraries where interlending is assumed to be part of their normal mandate. This reimbursement would be in terms of the difference in numbers between items loaned to and items borrowed from Canadian libraries (providing this difference exceeds 999 loans), multiplied by the average cost of lending an item, as determined by a standard annual survey of these costs at the net lending libraries. The cost of such a programme, for 1975, was estimated not to exceed a million dollars.

Secondly, it was recommended that the national libraries develop a collection of periodical literature, and systems for the expenditious delivery of items from the collection. The best approach to the creation of this collection would be through the establishment of a separate facility committed only to periodical storage and retrieval. Further to this, in 1977 an Interdepartmental Ad Hoc Working Group to Study the Canadian Library Association Brief on Interlibrary Loan published a report to the ministers advocating a central lending collection.

Thirdly, it was recommended that the National Library of Canada serve as co-ordinator for the development of a national system of national, provincial and regional union catalogues, through the provision of standards, cataloguing data, and other suitable forms of support. This is under study at present.

A multiplicity of union catalogues for monographs and serials exist but the most important ones are:

Canadian Union Catalogue - It was established in 1950 and is maintained by the National Library. It contains about twelve million cards representing an estimated four million titles at more than 300 libraries.

The number of location reports received from the contributing libraries in 1976/77 exceeded 1,300,000.

For the location of serials in Canadian libraries the following lists are available:

- *Union List of Serials in Libraries of the United States and Canada.* 3rd ed. New York, H.W. Wilson, 1965. 5v.

Sixty-five Canadian libraries have reported their holdings to this union list.

- *New serial titles; a union list of serials commencing publication after December 31, 1949. 1950-1970 cumulative.* New York, Bowker, 1973. 4v.

Two hundred and seven Canadian libraries have reported their holdings to this list.

- *Union List of Scientific Serials in Canadian libraries.* 6th ed. Ottawa, Canada Institute for Scientific and Technical Information, 1975. 2v.

Contains holdings for 247 libraries and covers 37,614 titles.

- *Periodicals in the Social Sciences and Humanities currently received by Canadian Libraries.* Ottawa, National Library of Canada, 1968. 2v.

Includes about 12,000 titles received by 179 libraries, but it does not list older titles that have ceased publication or provide information on holdings. When this list was being compiled the National Library started a union catalogue of serials on cards made up of those withdrawn from the union catalogue of monographs and of new titles and holdings reported by participating libraries. Plans exist for a future union list of periodicals in the social sciences and humanities which will merge information from the printed list and the card union catalogue. Portions of the Union Catalogue of Serials have been edited and published in several selective union lists:

- Union list of serials indexed by Social Sciences Citation Index held by Canadian libraries/Inventaire des des publications en série répertoriées dans le Social Sciences Citation Index disponibles dans les bibliothèques canadiennes. Ottawa, National Library, 1974. 192p.

- Union list of serials in education and sociology held by Canadian libraries/Inventaire des publications en série dans les domaines de l'education et de la sociologie disponibles dans les bibliothèques canadiennes. Ottawa, National Library, 1975. 221p.

- Union list of serials indexed by Public Affairs Information Services Bulletin held by Canadian libraries/ Inventaire des publications en série répertoriées dans le Public Affairs Information Service Bulletin disponibles dans les bibliothèques canadiennes. Ottawa, National Library, 1977.

- Union list of Polish serials in Canadian libraries/Inventaire des publications en série polonaises dans les bibliothèques canadiennes. Ottawa, National Library, 1977.

Other specialised lists are also available such as: Checklists of Law Reports and Statues in Canadian Law Libraries/Listes de contrôle des recueils de jurisprudence et des statuts dans des bibliothèques de droit du Canada. Ottawa, National Library, 1977. 293p.

- Periodical in Canadian Law Libraries. Toronto, York University Law Library, 2ed., 1973. 190p.

- Collections of official publications in Canada (Research Collections in Canadian Libraries, II Special Studies; v.5) Ottawa, National Library, 1976.

Location of newspaper holdings can be made through:

- American newspapers, 1821-1936; a union list of files available in the United States and Canada. New York, Wilson, 1937. 791p.

- Newspapers in microforms: United States, 1948-1972. Washington, Library of Congress, 1973. 1056p.

- Newspapers in microforms: foreign countries, 1948-1972. Washington, Library of Congress, 1973. 262p.

- Union list of non-Canadian newspapers held by Canadian libraries. Ottawa, National Library of Canada, 1968. 69p.

(This list is being updated)

- Union List of Canadian Newspapers held by Canadian Libraries/Liste collective des journaux canadiens disponibles dans les bibliothèques canadiennes. Ottawa, National Library, 1977. 483p.

For monographs, besides the above mentioned Canadian Union Catalogue other union catalogues with more limited scope are available. In Nova Scotia the Provincial Library maintains a union catalogue for 45 libraries of different types. Libraries in Nova Scotia generally apply first to this union catalogue, and unlocated requests are referred by the Provincial Library to the National Library.

The Saskatchewan Provincial Library maintains a union catalogue covering the holdings of 50 libraries of all types except university libraries. This catalogue provides access to over 400,000 titles and in 1977 it supplied 59,841 locations in response to 79,118 requests. It also refers unlocated requests to the National Library.

Other union catalogues and union lists exist in the country covering the holdings of a number of libraries of a particular type, e.g., government or hospital, usually within a given geographic region.

Sources:

Stuart-Stubbs, B. et al. Interlibrary loan in Canada, a report of a survey. Vancouver, University of British Columbia, 1975.

Canadian Union Catalogue Task Group. Final report to the National Librarian of Canada. Ottawa, National Library of Canada, 1976.

Patterson, F.E., National Library of Canada. Personal communication 14th March 1978.

COLOMBIA

A code and a standard form have been prepared by the Fondo Colombiano de Investigaciones Cientificas 'Colciencias' with the collaboration of the Asociacion Colombiana de Bibliotecarios.

It is an informal system with no co-ordinating agency. Costs for the provision of materials are shared between the two libraries involved, but the code does not make clear which will pay for the provision of copies.

The provision of interlending services is considered within the framework of the national information system.

It is said that interlending is being conducted without difficulty among all the libraries and documentation centres in the country.

A union catalogue of periodicals for social sciences, humanities, medical and agricultural sciences has been published recently. The publication of the part covering pure sciences and technology is expected.

Sources:

Arias Ordonez, Jose. Personal communication. 2.8.1977.

Fondo Colombiano de Investigaciones Cientificas y Proyectos Especiales "Francisco Jose de Caldas". Reglamento colombiano de prestamo interbibliotecario. Bogota, 1974.

FID/CLA folleto de difusion no. 20. Mexico, Febrero, 1977.

CZECHOSLOVAKIA

Interlending in Czechoslovakia really began with the development of the library system after 1918. Its development, however, did not benefit from systematic planning; it evolved in the light of experience and need. Control of its development began in 1963 with the introduction of regulations for national and international lending which made participation by libraries obligatory. A commission on interlending is responsible for establishing directives on the development, organisation and methodology of interlending. Library users are registered and interlending is available to everyone. A standardised loan form is used and requests are circulated by the use of union catalogues and to libraries specialising in particular subjects.

Union catalogues: Printed:

Seznam vedecke a technicke literatury 1950-1960 (Books). Prague.

Becka, J.; Foch, V. Soupis cizozemskych periodik v knihovnach Ceskoslovenske republiky. (Periodics to the year 1928.)

Lomsky, J. Soupis cizozemskych periodik technickych a pribuznych, 1928-1953. Prague.

Souborny seznam odbornych zahranicnich casopisu (z devizovych oblasti). Prague, 1960, 1961, 1962, 1963, 1964.

Since 1965 without socialist countries under the title:

Soupis zahranicnich periodik z devizvych oblasti dochazejicich do CSSR v roce. Prague, 1965, 1966, 1967, 1968.

Zahranicne periodika v CSSR 1969. Bratislava.

Not printed:

Celostatni evidence zahranicni literatury, 1950-

Two identical union catalogues covering the whole of Czechoslovakia are held at Prague and Bratislava.

Source:

Jakubekova, L. Leihverkehr zwischen den Bibliotheken und Internationaler Leihverkehr in den universalen wissenschaftlichen Bibliotheken in der CSSR. Paper presented at the Erste internationale Beratung von Spezialisten der Bibliotheken der sozialistichen Länder zu Fragen der Gesamtkataloge und des internationalen Leihverkehrs. Prague, 3-5 December 1975.

Interlending is centralized to a certain extent for public libraries, and decentralized for research libraries.

In the case of public libraries, city and village libraries primarily borrow from their own county library. A county library may borrow from other similar libraries, from the storage library of the public libraries, from an information bureau that is responsible for the location of materials and for interlending, from the Statsbiblioteket i Arhus which besides being a university library and one of the national libraries is also the main library for the public libraries, and from special libraries. The information bureau and the Statsbiblioteket borrow from research libraries and foreign countries.

Research libraries apply directly to each other. Since special subjects have been distributed among a number of research libraries, most of these are the main libraries for one or more limited areas.

There are no written guidelines for the operation of the system. Although the procedures are considered to run smoothly, some problems have been identified, such as queuing of borrowers in those libraries in which heavy demand is concentrated, difficulties in locating materials, and problems resulting from the standardization of forms, use of Telex and use of photocopying.

A suggestion has been made to transform the information bureau into a central lending bureau which would be responsible for: 1) location of materials and lending, 2) identification of demand (which publications should be purchased by which library, number of copies etc.), 3) establishment of directives and standards for Interlending.

There is no established procedure for charging for photocopies and postage.

In 1973 the following union catalogues were available in Denmark:

for monographs

- Faelleskatalog over danske videnskabelige og faglige bibliotekers erhvervelser af udenlandsk litteratur i 1901- . København, 1902- .

This is the union catalogue of acquisitions of foreign literature in Danish research libraries which appears annually. There are no cumulations and the last published volume appeared in 1970.

- Udenlandsk faglitteratur i danske folkebiblioteker 1966/1967- . København, 1969- .

Union catalogue of acquisitions of foreign literature in the major Danish public libraries. Annual. Latest year published: 1969.

- Udvalg af nyere udenlandsk litteratur indgaet i Statsbiblioteket i Arhus i arene 1938/40- . Arhus, 1941-

This is a selective catalogue of acquisitions of foreign literature in the state and University library of Arhus. Latest year published: 1971.

Samkatalog över nyanskaffat konferenstryk (kongres beretninger). Lyngby, 1975.

A quarterly union catalogue with annual cumulations of conference proceeding received at the central technological libraries of Denmark, Finland, Norway and Sweden.

for serials

- Fortegnelse over løbende udenlandske periodica ved danske videnskabelige og faglige biblioteker... pr. 1. januar 1953. København, 1955.

A catalogue of current foreign periodicals in Danish research libraries.

- Supplement til Periodicakatalog af 1953. København, 1959.

Catalogue of current foreign journals in the Royal Library, University Library, State and University Library of Arhus.

- Periodica i de storkøbenhavnske folkebiblioteker. København, 1970.

Catalogue of periodicals in public libraries in Copenhagen. List of Danish and foreign serials, current and non-current, including holdings.

Dansk List-Tech. København 1960-1975. Lyngby, 1976/77.

An annual list of foreign periodicals in Danish libraries within the fields of technology, mathematics, physics and chemistry, and certain related fields.

Source:

Aagaard, H.J. Paper presented at the Western European Seminar on Library Interlending. Banbury, 10-15 March 1973.

Dahl, M. Secretary of Dandok. Personal communication 19th April 1978.

There is no central interlending library in Finland; the largest libraries in the country act as lending centres. The majority of interlending requests are directed to central libraries of various fields and to the largest university and college libraries; the sixteen biggest interlending libraries provide 90% of all research library loans. The main group of users consists of the libraries of the new universities and colleges, and of industrial libraries. The large libraries also send by far the greatest number of interlending requests to other countries. A substantial number of them are sent to other Scandinavian libraries.

For national interlending the rules given by the Council of Research Libraries in Finland are observed. They are published in the guide:

Kurikka, Anna-Maija and Liinamaa, Matti, Kotimaisen Kaukopalvelun opas (Guide to national interlending.) Helsinki, Tieteellisten kirjastojen lautakunta (Council of the Research Libraries in Finland.) 1972. 38p.

To facilitate interlending, a list of Finnish research libraries has been published.

Suomen tieteellisten kirjastojen opas. Guide to research libraries and information services in Finland. Toim. (Ed. by) Matti Liinamaa and Marjatta Heikkila. Helsinki, Suomen tieteellinen kirjastoseura (The Finnish Research Library Association.) 1976. 149p.

The book contains information about research and industrial libraries, and also about larger city libraries.

Central Libraries

As foreign literature forms the majority of the research literature acquired in Finland, it is not possible to centralize the interlending system. The intention is that the book collections of the country should create a unified whole. For this reason the tendency has been to draft a definite division of tasks between large libraries, the collections of which form the main part of the research literature collections in the country. For this purpose, in 1972, the government made a decision to establish central research libraries. A library can be nominated as a central library if it has a diverse, serviceable and sufficiently large collection of literature in its own field. In 1978 there are six central libraries in Finland (see appendix).

Among the tasks of a central library is interlending: the libraries provide all their clients with the needed material, either from their own collections or from elsewhere. The trend has been to define the field of the central libraries so broadly that the interlending requests could easily and without any special measures be sent to the correct library. This arrangement is complemented by the union catalogues, which help officials to send requests to the proper place.

Interlending of National Literature

The interlending of national literature is mostly carried out by the central libraries of various fields and by special libraries. There are six deposit libraries (see appendix). The national collection of the Helsinki University Library is an archival collection, and it does not lend national literature. It does however publish a union catalogue of foreign acquisitions in Finnish research libraries. The latest catalogues have been put out on microfiche, arranged by ISBN. Most recent accessions to the union catalogue are held in the form of a card file in the Helsinki University Library. The five other deposit libraries give loans only on a very limited scale. The Finnish Council for Scientific Information and Research Libraries suggested in its first report (Komiteanmietintö (Committee report) 1974: 43) a reorganization of the national duties of the libraries. It was proposed that the libraries of the Finnish University in Turku (Turun yliopiston kirjasto) and that of the Swedish University (Åbo Akademis bibliotek) should together form a centre for the national interlending, and serve both Finland and other countries.

Interlending by Public Libraries

The centres for the interlending of public libraries are formed by the province libraries. In 1978 there are 464 municipal libraries and sixteen province libraries in Finland. These province libraries cover the whole country, except for Helsinki. The libraries generally send their requests first to the province library of their region; from there they are forwarded to the research libraries.

Development of Interlending Activities

In Finland much attention has been paid to the practical developing of interlending. Problems of interlending have been dealt with by a Section for Interlending, which from 1968 to 1972 worked under the Council of Research Libraries in Finland, later under the Finnish Research Library Association. The section regularly arranges seminars and meetings for the interlending staff in public and research libraries and in industrial libraries.

Telex is widely used, equipment was installed simultaneously in all the largest libraries, and today these libraries send most of their requests by telex. The IFLA code is used. The telex numbers of the libraries can be found in the Guide to Research Libraries and Information Services in Finland.

The ADP system of the research libraries, now under construction, will also facilitate interlending. Library catalogues can be put out in microfiche and distributed to other libraries. In the coming years the aim is to create an on-line system, through which the desired work can be located.

Interlending from other Countries

Interlending between the Scandinavian countries is very active. A considerable part of the publications requested by Finnish libraries, also non-Scandinavian ones, are obtained from libraries in Scandinavia, especially from Sweden. In order to facilitate interlending, several Scandinavian union catalogues have been compiled. The most important of them have been listed in the publication.

En fortegnelse over biblioteksveiledere og samkataloger over utenlandsk litteratur i nordiske biblioteker. A selected list of guidebooks and union catalogues of foreign literature in Scandinavian libraries. Oslo, Scandiaplanens spesialkomité for internordisk lånevirksomhet, 1977. 15p.

The most notable union catalogue project in operation is the so called NOSP project. The aim of this project is to create a Nordic union catalogue of periodicals. Both systematic and regional catalogues could be produced from the ADP-based file, and in the long run an on-line search would also be possible.

In connection with the Scandia plan (a Scandinavian plan for co-ordinating acquisitions) attention has also been paid to interlending. A Scandinavian interlending section has been in operation since 1975 under the main committee of the Scandia plan. On the initiative of the main committee a report on interlending has been prepared.

Liinamaa, Matti and Lounassalo, Marja, Fjarrlaneverksamheten inom biblioteks-systemet. Helsingfors 1975. 76p.

Besides Scandinavia, interlending requests to foreign libraries have been more and more frequently directed to the British Library Lending Division.

Appendix

The principal interlending libraries

Depository libraries

Eduskunnan kirjasto. Library of Parliament
Eduskuntatalo, 00102 Helsinki 10
Telex 121464 ekirj sf

Helsingin yliopiston kirjasto. Helsinki University Library
P.O. Box 312, 00171 Helsinki 17
Telex 121538 hyk sf

Jyväskylän yliopiston kirjasto. Jyväskylä University Library
Seminaarinkatu 15, 40100 Jyväskylä 10
Telex 28219 jyk sf

Oulun yliopiston kirjasto. Oulu University Library
P.O. Box 186, 90101 Oulu 10
Telex 32256 oyk sf

Turun yliopiston kirjasto. Turku University Library
Yliopistonmaki, 20500 Turku 50
Telex 62123 tyk sf

Abo Akademis bibliotek. Library of Abo Academy
Domkyrkogatan 2-4, 20500 Abo 50
Telex 62301 aabib sf

Special libraries

Agriculture

Maatalouskirjasto. Helsinki University Library of Agriculture
Viikki, 00710 Helsinki 71
Telex 122352 hymk sf
National central library for agriculture and nutrition

Economics

Helsingin kauppakorkeakoulun kirjasto. The Helsinki School of Economics Library
Runeberginkatu 22-24, 00100 Helsinki 10
Telex 122220 econ sf
National central library for business economics

Forestry

Metsäkirjasto. Forestry Library of Helsinki University
Unioninkatu 40 B, 00170 Helsinki 17
National central library for forestry

Humanities, General

Helsingin yliopiston kirjasto. Helsinki University Library
P.O. Box 312, 00171 Helsinki 17
Telex 121538 hyk sf

Turun yliopiston kirjasto. Turku University Library
Yliopistonmäki, 20500 Turku 50
Telex 62123 tyk sf

Turun yliopiston kirjasto. Turku University Library
Yliopistonmäki, 20500 Turku 50
Telex 62123 tyk sf

Abo Akademis bibliotek. Library of Abo Academy
Domkyrkogatan 2-4, 20500 Abo 50
Telex 62301 aabib sf

Medicine, Veterinary science

Lääketieteellinen keskuskirjasto. Central Medical Library
Haartmaninkatu 4, 00290 Helsinki 29
Telex 121498 lkk sf
National Central Library of Biomedicine

Eläinlääketieteellisen korkeakoulun kirjasto. College of Veterinary Medicine Library
Hämeentie 57, 00550 Helsinki 55
Telex 123203 elkk sf

Pedagogy, Psychology

Jyväskylän yliopiston kirjasto. Jyväskylä University Library
Seminaarinkatu 15, 40100 Jyväskylä 10
Telex 28219 jyk sf
National Central Library for Pedagogy, Psychology and Physical Education

Scientific serials

Tieteellisten seurain kirjasto. Library of the Scientific Societies
P.O. Box 248, 00171 Helsinki 17
Telex 122785 fsk sf

Social sciences

Eduskunnan kirjasto. Library of Parliament
Eduskuntatalo, 00102 Helsinki 10
Telex 121464 ekirj sf

Tampereen yliopiston kirjasto. Library of the University of Tampere
P.O. Box 617, 33101 Tampere 10
Telex 22263 tayk sf

Technology

Helsingin teknillisen korkeakoulun kirjasto. Helsinki University of Technology Library
Otaniementie 9, 02150 Espo 15
Telex 121591 tkk sf
National Central Library for Technology and allied Sciences

Tampereen teknillisen korkeakoulun kirjasto
Tampere University of Technology Library
P.O. Box 537, 33101 Tampere 10
Telex 22313 ttktr sf

Valtion teknillinen tutkimuskus, Teknillinen informaatiopalvelulaitos. Technical Research Centre of Finland.
Technical Information Service
Vuorimiehentie 5, 02150 Espoo 15
Telex 122972 vttin sf

Union catalogues:

Yhteisluettelo Suomen tieteellisten kirjastojen ulkomaisesta kirjallisuudesta. Samkatalog över utländsk litteratur i Finlands vetenskapliga bibliotek. Union catalogue of foreign literature in the research libraries of Finland. A. Books. B. Periodicals and serials. Helsinki, Helsinki University Library 1957-

Former title: Suomen tieteellisten kirjastojen lisaluettelo. Finlands vetenskapliga biblioteks accessionskatalog. 1929-1956. (This former edition comprises both books and periodicals.)

Finuc-ISBN (Union catalogue of the International Standard Book Numbers of foreign literature in the research libraries of Finland.) Helsinki, Helsinki University Library 1975- (microfiche)

Finuc-S 1974. Yhteisluettelo Suomen tieteellisiin kirjastoihin saapuvista ulkomaisista kausijulkaisuista. Samkatalog över utländska periodika i Finlands vetenskapliga bibliotek. Union catalogue of foreign serials in the research libraries in Finland. Helsinki, Helsinki University Library 1977.

Helsingin yliopiston laitosten ulkomaiset aikakauslehdet. (List of foreign periodicals in the libraries of Helsinki University.) Helsinki, Helsinki University Library 1971-1976.

Kahla, Martti. Luettelo Suomen tieteellisiin kirjastoihin saapuvista neuvostoliittolaisista ja Neuvostoliittoa käsittelevistä aikakaus- ja sanomalehdistä. (List of periodicals and newspapers printed in or relating to the USSR, available in Finnish research libraries.) Helsinki, Institute for Cultural Relations between Finland and the USSR 1961-

Taloustieteellisiä aikakauslehtiä. (Union list of foreign periodicals in the fields of economics and business sciences available in Finnish libraries.) Helsinki, Helsinki School of Economics Library 1969-

Vuosiluettelo. Suomen huomattavimpiin teknillisiin ja eraisiin tieteellisiin erikoiskirjastoihin tulleet-ulkomaiset aikakauslehdet. (Annual list of current foreign periodicals in Finnish technical and science libraries.) Helsinki, Finnish Association for Documentation 1956-

Additional union catalogues are mentioned in Suomen tieteellisten kirjastojen opas. Guide to research libraries and information services in Finland.

Sources:

Blafield, Martti and Häkli, Esko. Interlibrary lending system in Finland. Helsinki 1973. 10p. (Helsinki University Library. Occasional papers 5.)

Dahlø, Rolf. Interlending in Scandinavia. Four Library systems in transition. - BLL review 3(1975), p. 98-103.

Liinamaa, Matti and Lounassalo, Marja. Fjärrlaneverksamheten inom biblioteks-systemet. Helsingfors 1975. 76p.

Interlending is decentralized, and according to regulations of 1935 each library may establish its own lending policy with the exception of rare materials. There is no interlibrary loan code and no co-ordinating and monitoring central body. The Service Central des Prêts at the Bibliothèque Nationale has expanded its original function of controlling the loan of rare books and manuscripts to include a certain concern with the co-ordination and orientation of interlending, particularly of requests from abroad.

The Service Central des Prêts operates as an intermediary between the Bibliothèque Nationale, where it is located, and other Parisian libraries. It has established catalogues for internal use and provides locations of material. It is responsible for the loan of duplicate material of the Bibliothèque Nationale, and it has also available certain collections that have been especially built up for interlending, mainly French periodicals published after 1955. Unsatisfied requests are referred to other libraries which are thought likely to hold the required publication.

University libraries borrow directly from each other on a special request form that bears the name of the borrowing library on the front and the names of other participating university libraries on the back. The form circulates through the participating libraries, following an order predetermined by the borrowing library.

An example of an interlending service which serves a particular group of libraries on a subject basis is that provided by the Service Bibliographique de la Bibliothèque Interuniversitaire C. This service is located in Paris and since 1969 it has operated as an extension for medical documentation of the 17 libraries of the university hospitals centres (Centres Hospitaliers Universitaires) of Paris and its periphery. This service makes use of the collections of the Académie de Médecine and the Bibliothèque Centrale de Médecine as well as the holdings existing in each university hospital centre. The collections of the Centre National de la Recherche Scientifique (CNRS) and of the British Library Lending Division (BLLD) are also used. In 1975 the service was able to satisfy 14,885 requests.

The provision of copies is also made by the Centre de Documentation Scientifique et Technique of the CNRS. The Centre supplies on demand its special request forms which are of paper of different colours according to the type of reproduction required: photocopy, microfilm or microfiche. The service is available to individuals and institutions. A fee is charged for the items supplied and payment is made by means of coupons. Several university libraries and large special libraries have made their collections available to the CNRS. The Centre satisfied 300,000 requests in 1975 by making use of the holdings of its library and a network of 300 other libraries in France and abroad. Eighty per cent of the requests were satisfied by the holdings of the Centre's library.

The total volume of interlending in France has been estimated at 600,000 transactions per year. In 1975 a survey carried out covering the university libraries, the national library, the classified municipal libraries, the libraries of large research institutions, and the Service Central des Prêts identified a total of over 125,000 loaned items and over 119,000 borrowed items. University libraries loaned 77.3% and borrowed 94.3%.

The satisfaction rate, for university libraries and large research institutions' libraries, was 87.1%. For the classified municipal libraries it was 77.1%.

The average time to satisfy a request is one month, it can take longer to satisfy requests for French monographs on literature. In medicine this may be shorter, between two and three weeks. The system adopted by university libraries of circulating a request until it may be satisfied or not is a cause of criticisms and complaints. Some libraries have proposed to limit the circulation period of requests to one month. It has been found that most institutions would appreciate a minimum time of one week for the satisfaction of their requests.

France is planning to set up a national lending library, to be called Centre National de Prêt. This centre would be created on the basis of the existing Service Central des Prêts and it would have the privilege of legal deposit.

Union Catalogues:

- *Catalogue collectif des ouvrages étrangers (CCOE)*

It is maintained on cards by the Service du CCOE and it covers foreign books published after 1951. A location service is provided which in 1975 was able to satisfy 57% of 15,144 demands.

- Fichier collectif d'ouvrages français

This is a union catalogue on cards maintained by the Service Central des Prêts for French books.

- *Catalogue collectif des périodiques du début du XVIIe siècle à 1939 conservés dans les bibliothèques de Paris et dans les bibliothèques universitaires des départements.* Paris, Bibliothèque Nationale, 1967-

It covers French and foreign periodicals which are available in almost 75 libraries. It is in course of publication.

- *Inventaire permanent des périodiques étrangers en cours (IPPEC)*

It is maintained by the Service de l'IPPEC at the Bibliothèque Nationale. It publishes the:

- *Inventaire des périodiques étrangers et des publications en série étrangères reçus en France par les bibliothèques et les organismes de documentation.*

This is the main union catalogue for foreign serials which are available in 2,300 institutions covering about 50,000 titles. From 1956 to 1962 three editions were published. From 1965 it has been computerized and a master edition was published in 1969 with data collected in 1965. In 1973 a supplement was published. An up to date edition for 1973-1974 is now being prepared.

Sources:

Pallier, Denis et al. Statistiques du prêt interbibliothèques en 1975. Bulletin des Bibliothèques de France, 22 (5), 1977, 259-321.

Fayard, F. Paper presented at the Western European Seminar on Library Interlending. Banbury, 10-15 March 1973.

Nortier, M. Rapport sur le prêt entre bibliothèques en France. Paper presented at the Western European Seminar on Library Interlending, Banbury, 10-15 March 1973.

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GERMAN DEMOCRATIC REPUBLIC

Rules for interlending were established in 1976 and all state-funded libraries participate. The Institute for Interlending and Union Catalogues at the Deutsche Staatsbibliothek is responsible for co-ordination and development and for maintaining statistics. It also produces the union catalogue of the German Democratic Republic. The country is divided into five lending regions each of which has a central directing library which maintains a union catalogue of the region. Requests are first sent to the regional union catalogue and may then be tried in other regions. Only the central directing libraries may then send requests to the Deutsche Staatsbibliothek that have failed in the regions and only if it still fails may it be sent on to the Deutsche Bücherei. Apart from such territorial divisions, there is also a system of central subject libraries upon which increasing reliance is being placed.

There are several regional union catalogues:

Zentralkatalog der Sächsischen Landesbibliothek. Dresden.

Zentralkatalog Sachsen-Anhalt. Halle.

Thüringer Zentralkatalog. Jena.

Zentralkatalog Leipzig.

Zentralkatalog der Bezirke Neubrandenburg, Rostock und Schwerin. Rostock.

Other non-printed catalogues are available.

The Zentralkatalog der DDR-Zeitschriften und Serien des Auslandes covers foreign journals and series in the libraries of the G.D.R., is automated and printed, and permits the finding of locations of material required on interlibrary loan.

Sources:

Plötz, K. *Co-operation of libraries to ensure the satisfaction of requirements in information and literature by the broad masses of people: development and experiences in the German Democratic Republik.* IFLA/UNESCO Pre-Session Seminar for Librarians from Developing Countries. Antwerp, 1977.

Rother, E. Der Leihverkehr der Bibliotheken und der internationale Leihverkehr in der Deutschen Demokratischen Republik. Paper presented at the *Erste internationale Beratung von Spezialisten der Bibliotheken der sozialistischen Länder zu Fragen der Gesamtkataloge und des internationalen Leihverkehrs.* Prague, 3-5 December 1975.

Interlending operates on a decentralized and co-operative basis and its efficiency depends largely on the availability of a network of seven regional union catalogues, and various published catalogues of periodical holdings.

Users have access to the national library resources from any type of library in the country via the respective union catalogue. More than 500 libraries have been accepted as interlending libraries by the ministers of education of the different states of the republic.

Another feature of the library situation is the creation of central subject libraries. The first to be established was the Technische Informationsbibliothek which coordinates its activities with the Technological University Library at Hanover. It is responsible for technological literature and includes basic subjects such as mathematics, physics and chemistry.

Three other central subject libraries have been created: Zentralbibliothek der Wirtschaftswissenschaften in Kiel; Zentralbibliothek der Landbauwissenschaft in Bonn; and Zentralbibliothek der Medizin in Cologne. They cover their fields comprehensively paying particular attention to non-conventional materials.

These central subject libraries, research libraries engaged in the cooperative acquisition programme and certain specialized libraries constitute a uniform system supplying literature on a supraregional basis. At present there are 19 such research libraries providing literature relating to a total of 85 disciplines.

These libraries can be approached directly by individuals and institutions, that is, without the intervention of the regional union catalogues. This corresponds to the so-called "chanelled" lending while "general" lending has to make use of regional union catalogues. The holdings of these libraries are however covered by the respective regional union catalogues.

These union catalogues were established after the Second World War and in 1973 they had more than 35 million entries providing locations for about 70 million research items. In 1975 they processed 1,940,000 interlibrary loan forms, which accounts for some 70% of all interlending.

The union catalogues are co-ordinated by the Kommission fur Zentralkatalogfragen of the Deutscher Bibliotheksverbandes which ensures effective co-operation between them.

The aim of the union catalogues is to provide at least one location for each request received with the minimum delay, but a certain number of books cannot be located, and delays may occur because sometimes more than one union catalogue has to be consulted.

The availability of published union lists contributes to the fact that about 30% of interlending by-passes the regional union catalogues. These, however, contain locations for all periodicals and series held by the contributing libraries, which may range from small to large-sized libraries. It is easier for many libraries to direct requests to the appropriate union catalogue which takes upon itself the rest of the work.

Requests to the central subject libraries mentioned previously have to be made by means of special request forms, while for the other libraries standardized forms are used.

The following possibilities exist for one library to borrow an item from another:

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a. Applying directly to the appropriate regional union catalogue which will refer the request to the lending library. This is the most common procedure.

b. Applying to a specialized union catalogue.

c. Applying to a central subject library.

d. Applying to one of the national libraries.

e. Applying to one of the libraries involved in the co-operative acquisition programme (Sondersammelgebiets-Program).

f. Applying to a library holding deposit copies.

g. Applying directly to a holding library on the basis of published catalogues.

There are plans to produce the regional union catalogues on microfiches. This would contribute to alleviating these catalogues of much of their present work and would expedite the provision of loans.

The production by the Union Catalogue of Hessen of ISBN lists for post-1974 publications has proved successful, and will probably be adopted gradually the other union catalogues.

Guidelines for interlending between research libraries were revised in 1966.

- Leihverkehrsordnung für die deutschen (wissenschaftlichen) Bibliotheken.

and new guidelines are currently being drawn up.

According to a study by Tehnzen and Jacob published in 1975, it costs a borrower 0.50 DM to make an interloan request which is cheaper than taking a bus to get a book oneself. The total transaction costs are estimated at c.15 DM. A flat rate could be charged that would not hinder scholarly research, but which should be high enough to deter casual requests. The authors suggest a fee of 3.00 DM, though this could be lower for certain categories of requestors. This could be implemented by a central organization or by libraries attaching coupons, the providing library being able to claim some costs for satisfying the request.

Tehnzen and Jacob have made other suggestions to reduce the unwieldiness, slowness and the complicated nature of the present system. Their report includes recommendations approved in 1975 by the interlending working party of the library section of the Deutschen Forschungsgemeinschaft. The recommendations are divided into two parts. The first concerns general guidelines for building up and managing regional union catalogues. The second recommends changing the rules governing interlending.

Regional union catalogues:

- Zentralkatalog Baden-Württemberg. Stuttgart.
- Bayerischer Zentralkatalog. München.
- Berliner Gesamtkatalog. Berlin-West.
- Hessischer Zentralkatalog. Frankfurt.
- Niedersächsischer Zentralkatalog. Göttingen.
- Norddeutscher Zentralkatalog. Hamburg.
- Zentralkatalog des Landes Nordrhein-Westfalen. Köln.

The Staatsbibliothek Preussischer Kulturbesitz in West Berlin is developing three specialized union catalogues, namely:

- Osteuropa-Sammelkatalog.
- Zentralkatalog fur Orientalia.
- Zentralkartei der Autographen.

Other union catalogues that are available include:

- Standortkatalog der deutschen Presse. Bremen.
- Zentralkatalog der Bundeswehrbibliotheken. Düsseldorf.
- Gesamtkatalog des wissenschaftlichen Schrifttums fur Ostmittel-europa. Marburg.

Union lists of periodicals

- Gesamtverzeichnis ausländischer Zeitschriften und Serien. GAZS. West Berlin, Staatsbibliothek Preusischer Kulturbesitz, 1963-

- Gesamtverzeichnis der deutschen Zeitschriften und Serien. GDZS. Berlin-West, Staatsbibliothek Preussischer Kulturbesitz.

- Gesamtverzeichnis der Zeitschriften und Serien. GZS. West-Berlin, Staatsbibliothek Preussischer Kulturbesitz.

A continuation of GAZS and GDZS starting from 1971

- Standortverzeichnis ausländischer Zeitschriften und Illustrierten. SAZI. Berlin-West, Staatsbibliothek Preussischer Kulturbesitz.

There are also regional and local union list of periodicals some of which have been printed.

Sources:

Heydrich, Jürgen. The Infrastructure of Universal Availability of Publications. National lending systems in four countries: German Federal Republic. Paper presented to the Committee on International Lending and Union Catalogues, 42nd IFLA General Council Meeting, Lausanne, 1976.

Heydrich, J. Inter-lending in the German Federal Republic. Paper presented at the West European Seminar on Library Interlending. Banbury, 10-15 March 1973.

Tehnzen, Jobst and Jacob, Wilhelm. Die regionalen Zentralkataloge, die "Negativstelle" und das GAZS. Berlin, Deutscher Bibliotheksverband, Arbeitsstelle für das Bibliothekswesen, 1975. 177 p. (Bibliotheksdienst, Beiheft 116/117).

GREECE

It seems that interlending is incipient in this country. It is said that a kind of interlending exists between particular scientific and academic libraries. It is expected that the reorganized National Library will become the centre and co-ordinator of interlending activity.

A Union Catalogue of Periodicals was published in 1972 by the Centre of Documentation in Athens.

A Union Catalogue of Books in the Athens Area is mentioned in IFLA's guide to international loan services and union catalogues. It is maintained by the Greek Library Association.

Source:

Tzekakis, M. Paper presented at Western European Seminar on Library Interlending. Banbury, 10-15 March 1973.

HUNGARY

Interlending at both the national and international level has benefited from central organisation since 1945. The first rules were accepted in 1958 and these became law in 1963. The central responsible institution is the National Szechenyi library and all libraries are involved in interlending. The country is divided into three areas each of which has a central library which benefits from legal deposit. Requests are first sent to the relevant regional library and may then be circulated to the other regional libraries, only then may the request be passed on to the National Szechenyi library which will lend from its own stock and which maintains union catalogues to facilitate the direction of requests that are still not satisfied. Since 1951 it has received duplicates for loan but its collections are weak in certain areas. There are also central libraries for particular subjects. As the regional libraries are inadequate it is necessary to draw upon other resources, notably the subject libraries, which satisfy most requests, though they are not dedicated to interlending.

In 1972 a three month survey of fourteen large libraries indicated that of 10,000 requests over 90% were satisfied and that the average time to satisfy a request was 2½ weeks. 73.3% of requests came from the public libraries and small special libraries. The larger research libraries satisfied 64.9% of requests received. About 33% of Hungarian requests must be sent abroad. In 64% of cases the first library approached satisfied the request. It takes longer to provide photocopies than original documents. 66.4% of requests were for foreign material. Libraries with collections in particular subjects satisfy requests more quickly than libraries having general collections.

Union catalogues: Printed:

A magyar könyvtarak gyarapodásának központi cimjegyzeke. Budapest 1928-1930.

Külföldi könyvek országos gyarapodasi jegyzéke. Filozofia. Tarsadalomtudomanyok. Müveszet. Nyelveszet. Irodalom.

Termeszettudomanyok. Orvostudomanyok. Muszaki tudomanyok. Agrartudomanyok.

Published monthly in two series. Includes about 100,000 items received by Hungarian libraries: in decimal classification.

Kurrens kulföldi folyoiratok a magyar könyvtarakban. 1962, 1964, 1966, 1969.

[illegible]

Konyvek Központi Katalogusa. Orszagos Szechenyi Könyvtar.

Folyoiratok Központi Katalogusa. Orszagos Szechenyi Könyvtar.

Sources:

Cholnoky, G. A könyvtarközi kolcsönzen helyzete es problemai Magyarorszagon. *Könyvtari Figyelö*, no. 4, 1974, 295-310.

Racz, A.N. *Leihverkehr und internationales Leihverkehr.* Paper presented at the Erste Beratung von Spezialisten der Bibliotheken der sozialistischen Länder zu Fragen der Gesamtkataloge und des Internationalen Leihverkehrs. Prague, 3-5 December 1975.

ICELAND

Interlending is decentralized and is to be found more amongst the libraries of the health service. The volume of interlending between public and academic libraries is very small, and within the public library system it is practised mainly in the capital of the country between the central library and the branch libraries or between one branch library and another.

A union catalogue of foreign acquisitions was published in 1970 covering the accessions of the National Library, the University Library and eleven other research libraries. It is being published semiannually by the National Library. It only covers books but a union catalogue of foreign periodicals is being prepared which will be published in 1978.

Source:

Gudmundsson, F. Paper presented at the Western European Seminar on Library Interlending. Banbury, 10-15 March 1973.

Gudmundsson, F. Chief Librarian, Landsbokasafn Islands. Personal communication 14th February 1978.

INDIA

There is no formal, organised interlending system between libraries in India at the national, regional or local level apart from a number of exceptions in particular fields and among particular groups of institutions.

The various research laboratories of the Council of Scientific and Industrial Research (CSIR) are spread all over the country, and special libraries coming under single national bodies such as the Zoological Survey of India and the Geological Survey of India lend their stock to each other. University libraries also lend stock to each other. The five Indian Institutes of Technology (IITs) and the Indian Institute of Science (IISc) have well-organised interlending channels between themselves, and they will also lend material to institutions of local or national importance. Industrial and technological institutions and research laboratories have arrangements for lending material, the regional British Council libraries and British libraries in India make material available to members of any of all the libraries.

A Central Acquisition Programme for books and periodicals has been introduced for all the research laboratories of the CSIR. INSDOC acts as the central agency and has computerised acquisition and financial procedures.

Union catalogues:

- Regional Union Catalogue of Scientific Serials, published by INSDOC. A National Union Catalogue of Scientific Serials incorporating all the Regional Catalogues is planned for 1979.
- Union Catalogue of Periodical Holdings, (1971)
- Union Catalogue of Serial Holdings (1972) covering both IITs and the IISc.

Source:

Subrahmanyan M. British Council, India. Personal communication 4 August 1978.

IRELAND

The Irish Central Library for Students (ICLS) plays the role of a national and international interlibrary lending centre. All libraries in Ireland are affiliated to the ICLS and act as outliers: 46 public libraries, 7 university libraries, and 35 special libraries.

Libraries may apply to other institutions besides the ICLS, and the amount of interlending with libraries in the United Kingdom is very high, especially with the British Library Lending Division.

There is no national union catalogue of monographs. For periodicals the following union lists are available:

- Union list of current periodicals and serials in Dublin libraries. Compiled in the National Library of Ireland. Dublin, Irish Association for Documentation and Information Services, 1972.

- Union list of current periodicals and serials in Northern Ireland libraries. Compiled for the Northern Ireland Library Advisory Council by A.K. Megaw. Belfast, Northern Library Advisory Council, 1966.

Source:

Armitage, T. Paper presented at the Western European Seminar on Library Interlending. Banbury, 10-15 March 1973.

ISRAEL

Interlending is decentralized, although its co-ordination is envisaged within the activities of the Standing Committee of National and University Libraries of Israel.

Some libraries that have large holdings in specific areas play the role of resource centres providing a substantial number of loans compared to other libraries. These are: the Jewish National and University Library, the central library of the Weizmann Institute, the Jarcho Medical Library of the Hebrew University of Hadassah, the Library of the Volcani Institute and Hebrew University Faculty of Agriculture at Rehovot, and the Hebrew University Law Library on Mount Scopus.

The participation of public libraries in interlending is very small.

In a survey carried out in 1972 it was found out that some librarians borrowed from abroad without exhausting the possibilities within the country, particularly from the British Library Lending Division.

Photocopies of articles are provided through the National Center of Technological and Scientific Information.

Union catalogue of serials:

- Union list of serials in Israel libraries; natural, applied and social sciences. 4th ed. Jerusalem, 1975.
- Supplement to the 4th ed., new and updated titles in natural, applied and social sciences, titles in Humanities. Jerusalem, 1977.

Source:

Koren, Judith. Interlibrary lending among academic and research libraries in Israel. Libri 25 (2), July 1975, 98-132.

Shanin-Cohen, N. National Center of Scientific and Technological Information. Personal communication 26th March 1978.

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ITALY

There is no formal interlending system. Borrowers may request material from any library including the national libraries of Rome and Florence. The Consiglic Nazionale delle Ricerche supplies material on loan to Rome and exceptionally in Italy.

The location of items in Italian libraries is made through the following union catalogues:

- *Catalogo unico delle biblioteche italiane*

This is a catalogue on cards of nearly a million entries which locates monographs published in Italy and abroad acquired by Italian state supported libraries from 1958 onwards. It is maintained by the Centro Nazionale per il Catalogo Unico delle Biblioteche Italiane at the Biblioteca Nazionale Centrale di Roma.

- *Bollettino delle opere moderne straniere acquistate dalle biblioteche pubbliche governative italiane*

  Published by the national library in Rome.

Source:

Mancusi Crisari, L. Paper presented at the Western European Seminar on Library Interlending. Banbury, 10-15 March 1973.

East African Literature Service

This service is operated by the East African Agriculture and Forestry Research Organization at Muguga near Nairobi. The library of the Organization provides a current awareness service to research institutes, libraries and individual researchers in East Africa, according to their interests. Photocopies of the tables of contents of journals are supplied on which the articles of interest are marked. Copies of the articles are supplied quickly and free of charge. Subjects covered by the service are restricted to those of interest to the Organization. Its present output is about 18,000 copied pages per month.

'It is not unusual for the University of Nairobi to request photocopies of journal articles from the British Lending Library even when the particular journals are held by other libraries in East Africa. The articles are received much faster than from Dar es Salaam or Makerere. As far as inter-library loans are concerned, there is always the fear that books will get lost in the post and there is therefore reluctance to send them, particularly when they are expensive or irreplaceable items. Registered parcel post has been used but it can be expensive if the volume of inter-library loan is great.'

Union catalogue:

In the three university libraries of East Africa, there are union catalogues for East African materials. None has been published as yet.

Source:

Ndegwa, J. Cooperative storage and interlending in East Africa. IFLA/UNESCO Pre-Session Seminar for Librarians from Developing Countries. Antwerp, 1977.

In line with interlibrary cooperation, several programmes for interlending or interlibrary loan are carried on at the different levels by different groupings of institutions.

The Korea Scientific and Technological Information Center (KORSTIC) provides users with a referral service on a national scale. To facilitate the service, KORSTIC maintains information files and has been compiling a Union Catalogue of Foreign Scientific Journals since 1968. Revised and enlarged every other year, this catalogue, as a guide to the holdings of some 140 major libraries and R & D institutes in Korea, provides comprehensive bibliographic access to nearly 8,000 serials (in the 1976 edition) available in the country in the field of science and technology, and promotes interlibrary cooperation. A photoduplication service is available at cost directly from the holding organizations or through KORSTIC.

The Seoul National University Library, which is the largest library in Korea, maintains a programme of interlibrary use of materials among four national colleges and six national universities. Users have to consult materials on the library premises. Copies can be made at cost. No interlending service is available.

A similar system for the interlibrary use of materials if practiced among eighteen private university libraries. These libraries are co-ordinated by the Council of Private University Libraries which negotiates loans among member libraries and which is also exploring the possibility of setting up an interlending programme that will include all national university libraries and private university libraries.

The Medical Library Association which has a membership of 47 libraries maintains an interlending service for both books and articles.

The Library of the Korea Institute of Science and Technology maintains an interlending service among three libraries in the Seoul Research and Development Complex and has formed a Library Council comprising five research libraries and KORSTIC. This Library Council has standardized the request slip and other forms, and it is considering the expansion of the interlending system to include the Seoul National University Library and two or three private university libraries in the metropolitan area.

The Central National Library has supported the interlending programme of twenty-two libraries in the Seoul metropolitan area since 1970.

The Yonsei University, Ewha Woman's University and Seogang University libraries are relatively close to each other which and have photocopying and in-linrary use.

Union catalogues:

for monographs

- National Union Catalog of Foreign Publications (1970-).

It is maintained by the Central National Library and is participated in by seventy-eight libraries. The catalogue has been published in book form with annual supplements since 1971. It covers currently acquired foreign publications. (monographs).

- Union Catalogue for Monographs - Western Publications (1973-).

This is a publication of the library council of the Seoul Research and Development Complex. It lists monographs held in six libraries up to the end of 1972. It has been updated by annual supplements. It is compiled and edited by computer and copies are distributed to all major libraries.

for serials

- Union Catalogue of Foreign Scientific Journals (1968-).

It is compiled, published and updated by KORSTIC.

- Union list of foreign learned journals. Vol. 1. U.S. and European journals. Published in 1975.
  Vol. 2 Oriental journals. (To be published in March 1978).

This has been compiled and published by the Seoul National University Library.

- Union list of medical journals (1967-).

It is published by the Medical Library Association.

Sources:

Park, K.H. Resource sharing in the Republic of Korea. IFLA/Unesco Pre-Session Seminar for Librarians from Developing Countries, Antwerp, 1977.

Yong Kyu Lim. Director General, Technical Cooperation Bureau, Ministry of Science and Technology. Personal communication, 20th April 1978.

LUXEMBURG

Interlending is centralized in the national library which handles all requests from other libraries. These are mainly the academic libraries and some special libraries. It was stated in the report presented to the Banbury Seminar in 1973 that 'Because of the limited size of the country (there is no problem of distance) there is not much interlending within Luxemburg. People can come to the National Library to refer to the works they require'.

Union catalogues:

- Catalogue collectif belge et luxembourgeois des périodiques étrangers en cours de publication. Bruxelles, 1965.

  For further details see the entry for Belgium.

- Catalogue sur fiches des journaux et périodiques luxembourgeois conservés à la Bibliothèque nationale et aux Archives de l'Etat. Bibliothèque nationale.

Source:

Trausch, G. Paper presented at the Western European Seminar on Library Interlending. Banbury, 10-15 March 1973.

MALAYSIA

No single national organisation is responsible for interlending in Malaysia. The system currently in operation is based partially on union catalogues for serials, and on selected large collections of the university libraries for monographs, especially the University of Malaya Library.

An interlibrary loan code was introduced in 1977 covering the university libraries and the National Library, and standardised request forms are used. Smaller libraries are being persuaded to adopt the code and the form.

The total interlending demand in Malaysia is about 5,000 items per annum of which 60% are for photocopies and microforms. The National Library successfully meets most requests for Malaysian national imprints but the provision of older publications is not so successful and the satisfaction level for foreign monographs is lower. In 1977 the National Library lent 697 items and provided 315 photocopies. Also in 1977 13 special libraries supplied 1032 items out of 1306 requested,but as there are 70 special libraries in the country the statistics should be treated with caution.

There is very little interlending activity between Malaysia and the other countries of South East Asia except to a limited extent with Singapore.

Interlending provision is not given a high priority by most library authorities, personnel is therefore insufficient and requests are handled slowly. Telex facilities have been installed in the university libraries and in the National Library to improve interlibrary communication. The National Library is encouraging the view that all collections should be seen as part of the national information resources and should be made freely available to everyone.

Union Catalogues:

- National Union Catalogue. Maintained by the National Library
- Union list of Serials. Maintained by the National Library from entries from 31 institutions. The Universiti Sains Malaysia is making efforts to computerise this list.
- A union catalogue will be produced as a by-product of the Malaysian MARC project, currently being developed at the Universiti Sains Malaysia.

Sources:

Lim Huck Tee. UAP and Malaysia. Unesco bulletin for libraries (forthcoming)

Lim Huck Tee. Interlending in Malaysia: a supplementary paper to UAP and Malaysia.

Ahmad Bakeri Abu Bakar. National Library of Malaysia, Reference Division. Personal communication 5th August 1978.

There is no structured service. Interlibrary lending takes place in particular among research libraries and academic libraries. The Asociacion de Bibliotecarios de Ensenanza Superior y de Investigacion (ABIESI) has prepared an Interlibrary Lending Code as well as a request form.

Interlibrary lending is said to work particularly well in the area of the Federal District whereas its use is very low in the interior of the country.

The Consejo Nacional de Ciencia y Tecnologia (CONACYT) has shown an interest in supporting activities intended to improve interlending in the country through its Direccion de Informacion y Documentacion.

The second edition of the Catalogo Colectivo de Publicaciones Periodicas Existentes en la Republica Mexicana has been published recently.

Sources:

Carrion, Guadalupe. Coordinadora de la Direccion de Informacion y Documentacion de CONACYT. Personal communication. 25.7.1977.

Asociacion de Bibliotecarios de Instituciones de Ensenanza Superior y de Investigacion. Proyecto de codigo de prestamo interbibliotecario. 1976

FID/CLA folleto de difusion no. 20. Mexico, Febrero, 1977.

Requests for loans are sent to the union catalogues maintained by the Royal Library and the Technical University at Delft. Thus there is a certain level of centralization, although libraries are not obliged to make use of the union catalogues.

Research libraries lend publications freely by post to other research libraries, special libraries, public libraries, other institutions and private persons.

At a seminar at Banbury, in 1973, it was stated that thirteen existing libraries had then been assigned the function of 'regional support libraries', most of them being large public libraries. The task of these libraries is to provide scholarly literature, mainly for advanced studies outside the universities, for the inhabitants of a certain region. It is the intention that in future requests in general will be directed to a regional support library and only afterwards through the union catalogues to the large research libraries. However, for specific scientific literature a direct approach to union catalogues and research libraries will always be permitted. Moreover, for much used scholarly literature, of which there has to be a large stock, public libraries can apply to the national public library center. In 1973 this new system was in its first stage, namely the building-up of collections.

In 1971 the union catalogues in the Royal Library received and processed 222,756 requests, with a failure rate of more than 20%.

Post, Telex and telephone are used for requesting materials.

The Koninklijke Bibliotheek maintains the following union catalogues on cards:

- Nederlandse centrale catalogus

About five million books published in the Netherlands and abroad. More than 90 libraries participate in this union catalogue.

- **Centrale catalogus van periodieken**

More than 200 libraries participate in this catalogue which covers about 130,000 periodicals and serials. It is being automated and is being published.

- **Centrale catalogus van congressen**

Lists about 20,000 titles found in 278 participating libraries.

The library of the Technical University at Delft maintains the:

- **Centrale technische catalogus**

154 participating libraries. 500,000 titles. Books and periodicals.

There is also a union catalogue of economics literature which is maintained by the Economische Voorlichtingsdienst.

Source:

Willemsen, A.W. Paper presented at the Western European Seminar on Library Interlending. Banbury, 10-15 March, 1973.

NEW ZEALAND

The National Library offers a loans and locations service to all New Zealand libraries, lending material from its own stock where possible, or forwarding requests direct to the appropriate holding library identified through the card files.

Unfulfilled requests for both monographs and serials are considered for purchase for National Library stock as part of the National Resources Programme.

The National Library is the centre for International Interlending. It borrows from overseas on behalf of research workers throughout New Zealand.

The rules governing interloan in New Zealand were drawn up by the New Zealand Library Association, the body responsible for beginning the collection of bibliographical data from which the present central card records grew.

Interlending in New Zealand is free.

Union catalogues:

The National Library maintains the National Union Catalogue, and the Union List of Serials and Conference Proceedings, in card form.

The most recent edition of the Union List of Serials in New Zealand Libraries, the fourth, was published in microfiche in 1976. The second edition of the Union List of Conference Proceedings in New Zealand Libraries: Serial Conferences was published in 1977.

Source:

Ronnie, Mary, A. National Librarian, The National Library of New Zealand. Personal communication 15th March 1978.

A decentralized system is being implemented, although the National Library will act as a co-ordinating agency for interlending. Requests on a prescribed form should be sent directly to the lending library if known and to the National Library if not known. Every transaction should be reported for monitoring and statistical purposes to the National Library.

Smaller scale schemes exist between university libraries on a subject basis and are facilitated by physical proximity. Special libraries in particular localities also lend specified materials. A census of existing schemes is being undertaken.

A handbook has been published: Library cooperation in Nigeria phase one: inter-library lending programme. Lagos. (National Library publication, 36).

Union catalogues:

for monographs

- National Union Catalogue.

It is maintained by the National Library and it is being edited for publication within the next two years. It will be issued in parts.

for serials

- National Union List of Serials.

It is also maintained by the National Library. Its publication was expected during September 1977.

- Union list of scientific and technical periodicals in Nigerian libraries. 2.ed. Edited by S.M. Lawani. Ibadan, International Institute of Tropical Agriculture, 1973.

Source:

Aje, S.B. Cooperative acquisition programme in Nigeria. IFLA/UNESCO Pre-Session Seminar for Librarians from Developing Countries. Antwerp, 1977.

NORWAY

In this country both patterns of centralized and decentralized interlending are to be found. All the research libraries lend and borrow on a direct contact basis. Public libraries channel their requests through the respective county libraries that serve as central libraries for the public libraries of a district. The Oslo University Library plays a leading role in interlending both in its capacity as national library and as keeper of the National Union Catalogue.

A standard request form that can also be used for Telex transmission has been developed recently as well as rationalised lending routes and bibliographic standards. There is no interlibrary loan code.

The Deichmanske Library in Oslo serves as lending centre for the public libraries.

Union catalogues:

- Norsk samkatalog over utenlandske böker

A catalogue on cards maintained at the Oslo University Library for foreign books.

- Norsk samkatalog. Utenlandske periodika i Norge. Universitetsbiblioteket i Oslo.

Union catalogue of foreign and Norwegian periodicals published in 4 parts: BIO-MED (Biology and Medicine), TEKN-NAT (Technology etc.), SAMFUNNSVIT (Social Sciences) and HUMANIORA (Humanities).

SOURCES:

Aschim, E. Paper presented at the Western European Seminar on library interlending. Banbury, 10-15 March 1973.

Hasselberg, Inge. Inter-library lending in Norway. Scandinavian Public Library Quarterly, 9 (1), 1976, 24-28.

Rød, Jan Erik. Fjernlan i Norge - og i Sverige. Bok og Bibliotek, 41 (4), 1974, 195-199.

The principles and rules of procedure for Polish libraries in the field of interlibrary lending are founded by the Order and Instructions of Ministry of Culture and Arts, dated 23rd December, 1953, published in the official government's journal "Monitor Polski" of 1954, no. A-19. Libraries of all kinds, incorporated into the nation-wide library network, namely: scientific, specialist, public, school and pedagogical libraries, make use of interlibrary lending.

The location of a publication is identified in general by means of union catalogues maintained by the National Library, as well as on the basis of union lists, such as the Union List of Foreign Periodicals or the List of Translations, both maintained by the National Centre for Scientific, Technical and Economic Information. Moreover, there are also employed regional and branch union catalogues, maintained by certain scientific libraries. Approved methods for the identification of locations include telephone and Telex enquiries. When a library, is located - the library ordering a publication fills in the request form, with the relevant bibliographic data and - together with a letter - sends it to the correct library. The library satisfies the request within 7 days of its receipt. In cases of difficulty in locating a library which owns the required publication the ordering library uses a so called "circulating request form", which is sent together with a letter to libraries with suitable collections. If the library, which receives the request cannot satisfy it, it sends the form to the next library within 3 days of its receipt, and is obliged to inform the requesting library of the name of the library to which the request has been sent.

The loan period is one month, excluding the time for mailing and returning to the sender. This period may be extended by agreement with the lending library.

The publications borrowed from other libraries are in principle made available for use in a reading-room. Exceptionally, less valuable publications may be lent for use outside, but not in the case of publications borrowed from the National Library.

The library can refuse to lend unique items or items that are heavily used locally, as well as those which need special care.

Both, the library sending the requested publication and the library returning it inform by separate letter the library, to which the package is addressed. The library also confirms by letter the receipt of borrowed or returned publications, promptly after their receipt. Interlibrary lending is free of charge. However, when a library does not lend the required publication but makes a microfilm, xerox or photocopy, the requesting library bears all costs. The cost of sending a publication to the requesting library is covered by lending library, and its return by the borrowing library.

The borrowing library bears full responsibility for the safe-keeping and the return of borrowed publications within a fixed time limit. If the borrowed publication is damaged or lost the borrowing library provides a copy of the same publication or of another publication, which is approved by the lending library as acceptable and being of equal value. Otherwise, the borrowing library pays a sum fixed by the lending library. The amount of compensation for damage to a borrowed publication is also fixed by the lending library.

In libraries in which interlibrary lending is conducted on a wider scale, this activity is carried out by a special section for interlibrary lending, at other libraries this work is done by the librarian responsible for all lending operations. In both cases, however, it is based on approved principles - covering the sending of requests and whether they are satisfied, as well as the recording of publications borrowed from other libraries.

Source:

Derentowicz, M. Centrum Informacji Naukowej Technicznej i Ekonomicznej.

Personal communication 16th March 1978.

PORTUGAL

Although there is legal provision for it, no official interlending service exists in Portugal. The Biblioteca Geral da Universidade de Coimbra, which has had the privilege of legal deposit since 1931, maintains an unofficial lending service. Interlending is carried on on a very individual basis, it is not unknown for a librarian to travel to another library to borrow a work.

Union catalogues:

- Publicacoes periodicas estrangeiras inventariadas nas bibliotecas portuguesas. Lisboa, Centro de Documentacao Cientifica do Instituto de Alta Cultura, 1948-1959. Suplemento 1960.

- Catalogo coletivo das bibliotecas portuguesas

A catalogue on cards maintained by the Biblioteca Nacional de Lisboa covering foreign and Portuguese publications published before 1932.

Source:

Peixoto, J. Paper presented at the Western European Seminar on Library Interlending. Banbury, 10-15 March 1973.

SINGAPORE

Interlending is decentralized. The Sub-Committee on Interlibrary Loans set up by the Joint Standing Committee on Library and Bibliographical Services drew up an Interlibrary Loan Code in 1969. A standard request form printed by the Library Association of Singapore is now in use. The National Library, university libraries, government department and quasi-government department libraries are the main agencies among which interlibrary loans are made.

'As distance between libraries are short, there is no difficulty arranging for materials to be transported on interlibrary loan from one library to another.'

Union catalogues:

A Union Catalogue of Scientific and Technical Serials was first compiled on cards and maintained by the Reference Division of the National Library. In 1977, it was computerized and published jointly by the National Library and the Singapore Institute of Standards and Industrial Research (SISIR). Serials classified in the classes 500, 600 (except medicine) and 720 of the Dewey Decimal Classification are included. Fringe subjects such as economics, transport and town planning are selectively included.

The National Library also maintains a Union card catalogue of library science materials held in Singapore libraries.

Source:

Quah Swee Lan. Resource sharing in Singapore libraries. IFLA/UNESCO Pre-Session Seminar for Librarians from Developing Countries. Antwerp, 1977

SPAIN

The rule is that interlending requests should be sent to the national library but other major libraries are applied to directly.

Union catalogue:

- Catalogo colectivo nacional central

It is maintained by the Biblioteca Nacional and most of the publications included were published before 1800.

Source:

Oyarzum, M. Paper presented at the Western European Seminar on Library Interlending. Banbury, 10-15 March, 1973.

SWEDEN

In Sweden interlending is decentralized, although a certain degree of centralization is found in the provision of loans to public libraries through three interlibrary lending centres.

Public libraries

From 1962 to 1968 three interlibrary lending centres were created in important public libraries that cover the country on a regional basis: the Malmö Public Library serves the southern and western parts of the country, the Umeå Public Library serves the northern counties, and the Stockholm City Library serves the central areas.

There are twenty-four public county libraries in the country with regional responsibility for special works. The local library is responsible for collecting literature most in demand and literature of local interest. The regional central libraries co-operate in planning the acquisition of special works. Specialized and advanced materials should be provided by the interlibrary lending centres.

The typical routing procedure to be followed by a borrower is: 1) the local library; 2) the county library; 3) the interlibrary lending centre. The individual user should approach only the local library which will refer his request to the other libraries when appropriate.

In order to increase the speed of supply the above routine may be by-passed. For example, a request for a scientific text will be sent directly to a research library.

The county libraries started being established in 1930. In that year 23 loans were made and only two county libraries had been established. In 1967 when the number of county libraries had reached 24 the number of loans had reached 88,670, and in 1976 the number reached 160,830 loans.

The function of the interlibrary lending centres is to lend free of charge 'research materials', this has been interpreted as all reading materials, with the exception of the most popular fiction in Swedish. They also provide bibliographic and reference services as well as the location of materials in other libraries. These centres do not have stocks of their own, but they make use of the collections available in the library to which they are linked.

Research Libraries

Interlending among research libraries follows regional divisions by which southern libraries apply in the first place to the Lund University Library, western libraries to the Göteborg University Library, libraries from the central region to the Royal Library, the Stockholm University Library and the UppsalaUniversity Library, and northern libraries to the Umeå University Library.

The service is based on the guidelines set up in 1967:

- Forskningsbiblioteksrådet. Riktlinjer för interurban utlåning. Lund, 1967. A new revised edition and an interlending manual will be published in 1978.

Swedish printers are bound by law to deposit copies of works that they print at the Royal Library and the University libraries.

Data of a survey of interlending which was carried out in 1971 revealed that:

- The average time to satisfy a request was 9 days. This period could increase to 32 days if the requested material was on loan and had to be recalled.

- 78.9 per cent of the requests were satisfied at once, 12.9% were not satisfied, and 8.2% could be satisfied later.

- Ninety one per cent of the requests were sent by post, 4.6% by telex, and 4.4% by telephone.

- Research libraries send their requests almost exclusively to other research libraries of which the major ones are the Royal Library and the university libraries (50% of the requests received by these libraries came from other research libraries, and 35% from public libraries).

- Public libraries send 50% of their requests to other public libraries. The smaller public libraries send 70% of their requests to other public libraries and to the three interlibrary lending centres.

- It was calculated that the average total cost of an interlibrary loan was 40.05 Swedish crowns, and 27.17 crowns for a photocopy (reckoned on an average of 6 pages), and 17.29 crowns for an unsatisfied request.

- Public libraries did not always comply with the recommendation of the Forskningsbiblioteksrådet (Swedish Council of Research Libraries) to send their requests in the first place to the major research library of the region. Sixty per cent of the requests received by the major research libraries came from libraries outside their own region.

- More than 50% of the requests were for periodicals, mostly foreign journals, especially, those published between 1966-1971.

- Seventy eight per cent of requests were for foreign monographs and periodicals and about 80% for monographs and periodicals published between 1966 and 1971.

This survey suggested the following changes to improve the interlending system in Sweden.

- An interlending manual based on existing principles should be worked out in consultation with the library organizations concerned, and it should also include rules for loan periods, renewals, procedures for recalling overdue loans, use of Telex, instructions on how to fill a loan request form and on keeping statistics.

- A new interlibrary lending form with space for specification of purpose, source, libraries already tried and the latest acceptable receiving date. The form should have sufficient copies to serve the different purposes of checking and maintaining statistics.

- An agreement regarding which libraries should be responsible for the bibliographic work connected with interlending.

- A standard list of bibliographic tools that should be kept by the smaller libraries.

Union catalogues:

- *Accessionskatalog över utländsk litteratur i svenska forsknings-bibliotek.* 1886-

Lists the foreign acquisitions in Swedish research libraries

- AKN-Hum. *Nya böcker i humaniora och samhallsvetenskap vid större svenska forsningsbibliotek.* 1968-

Lists books in humanities and social sciences.

- AKN-Nat. Nya böcker i naturvetenskap, teknik och medicin vid större svenska forskningsbibliotek. 1968-

Lists books in natural sciences, technology and medicine.

- AKN-Hum/Nat. 1968-

This is a joint alphabetical index.

- Utlandska nyförvärv till större svenska folkbibliotek. 1948-

This is a union catalogue of foreign publications in the larger Swedish public libraries, namely all the regional central libraries plus two of the larger city libraries. It is supplemented by:

- Utländsk periodisk litteratur i större svenska folkbibliotek.

Lists periodicals accessions in the larger public libraries.

Sources:

Melin-Fravolini, K. Paper presented at the Western European Seminar on Library Interlending. Banbury, 10-15 March 1973. Personal communication 10th April 1978.

Paulsson, Egon. Inter-library loans in Sweden. Scandinavian Public Library Quarterly, 1 (4), 1968, 213-225.

Røed, Jan Erik. Fjernlån i Norge - og i Sverige. Bog og Bibliotek, 41 (4), 1974, 195-199.

SWITZERLAND

Interlending is based on the locations provided by the union catalogue of serials and monographs maintained by the Swiss National Library. The union catalogue locates foreign publications, and Swiss books published before 1900. Those published posterior to 1900 are available at the Swiss National Library.

Request forms are sent to the union catalogue for locations. The union catalogue marks the several possible locations on the form which is then routed to the first library within twenty-four hours. The lending library sends the publication directly to the borrowing library, or it refers the request to another holding library if the material is not available.

In 1977 the union catalogue of monographs had more than 5,857,000 cards representing more than 3,738,000 titles in 296 Swiss libraries. Together with the union catalogue of serials it reports holdings of 735 Swiss libraries. The total number of requests received in 1977 is in the order of 95,706.

Libraries wishing to participate in interlending are required to adhere formally to the network. Request forms are supplied by the Association des Bibliothecaires Suisses. Recommendations for interlending practice were established by the same association in 1975. The system is free of charge and reciprocity is expected from the participating libraries.

Union catalogue: Printed:

- Répertoire des périodiques étrangers recus par les bibliothèques suisses.
  5. ed. Berne, Association des Bibliothecaires-Suisses, 1973. - XXIV, 768 p.

Sources:

Guide du prêt interbibliothèques 1978. Berne, Catalogue collectif suisse. - in preparation.

Bibliothèque nationale suisse. Rapport pour l'année 1977.

TANZANIA

The Dar es Salaam University Library operates an extensive interlending service with all types of libraries in Tanzania, East Africa and overseas.

Union lists of serials:

- Periodicals in Eastern African libraries: a union list. 9th ed. University of Nairobi Library, 1975.
- Periodicals in Tanzania libraries: a union list. Tanganyika Library Service, 1976.

The compilation of the Union List of Periodicals in the University of Dar es Salaam Library system (including the main Library, Muhimbili Medical Faculty and the Morogoro Faculty of Agriculture and Forestry) is in progress. It is scheduled to be completed and published this year. This is an important step towards the publication of the Union List of Serials in Tanzania.

There is no union catalogue of monographs for Tanzania or the East African countries. The libraries of the universities of Dar es Salaam, Nairobi and Makerere exchange their catalogue cards of East African materials. The University Library houses a union catalogue of its branches which includes the holdings of the National Museum Library and the State House Library (up to 1975).

(The second list mentioned above is said not to include periodicals from the University Library's very important research and academic library in the country'. In: F.K. Tawete. The need for resource sharing among libraries in Tanzania. IFLA/UNESCO Pre-Session Seminar for Librarians from Developing Countries. Antwerp, 1977.)

Source:

Newa, J.M. Cooperative acquisition in Tanzania: the role of the University of Dar es Salaam Library. IFLA/UNESCO Pre-Session Seminar for Librarians from Developing Countries. Antwerp, 1977.

TURKEY

One of the functions of the Bibliography and Documentation Institute of the National Library is to provide an interlending service, especially for foreign materials.

The Turkish Scientific and Technical Documentation Center (TURDOK) also provides photocopies to satisfy interlibrary loan requests. Requests for books are referred to the National Library.

Union catalogues:

- Union catalogue/Catalogue collectif. *Milli Kütüphane Genel Müdürlüğü*

It is maintained by the Bibliography and Documentation Institute and includes foreign publications in Turkish libraries.

- *Ankara bilimsel ve teknik süreli yayinlar toplu katalogu.* Ankara, TURDOK, 1971.

A union catalogue of scientific and technical periodicals in libraries of Ankara.

Source:

Tuncer, G. Paper presented at the Western European Seminar on Library Interlending. Banbury, 10-15 March 1973.

U.S.S.R.

Interlending in the USSR follows a hierarchical pattern in which there are four levels:

level 1. All-Union interlending centres with multiple branches and special interlending branch centres.

level 2. General and special interlending centres of the republics.

level 3. Regional interlending centres, both general and special (regional, district and city libraries).

level 4. Libraries of scientific establishments, industrial concerns, establishments of higher education and other organisations of the USSR.

The Lenin State Library performs the duties of an all-state co-ordinating centre.

The all-state interlending system includes all the libraries of the country, and is essential for all libraries of all types in all fields. It permits a step-by-step, territorial routing of literature requests and their satisfaction by cooperative use of the stock of all soviet libraries. Within the system it is possible to apply to any higher level, avoiding the intervening levels if the publication is only held in the stock of a library of a higher level. On average between 70% and 90% of all requests are satisfied by libraries of the second and third levels.

Union catalogues:

The interlending system makes wide use of card and printed union catalogues:

In the USSR (State Public Scientific and Technical Library) an automated system for an all-Union union catalogue has been created for foreign literature in the fields of the sciences, technology, agriculture and medicine. The hierarchical structure of the system is based on the cooperative organisation between the all-Union centre and the regional and branch services of the system for the collection and processing of information and in serving the reader.

At present the system ensures the preparation and publication, on the basis of a single data base, of the All-Union Union Catalogue of Foreign Books which is of the following structure:

I New foreign books. This includes information on newly published books abroad and serves the aims of co-ordinated acquisition.

II All-Union Union Catalogue of Foreign Books.

Part I : Polymathematical alphabetical index with auxiliary guides
Part II : Subseries of the systematic catalogue.

Series I : Natural Sciences.
Series II : Technology.
Series III : Agriculture.
Series IV : Medicine.

Part III : Regional union catalogues.
Union catalogue of the Lithuanian SSR
(At present work is being carried out on union catalogues for other regions.)

The system ensures the preparation and publication of the All-Union Union Catalogue of Foreign Periodicals, which is of the following structure:

Part I : Index of publications, subscribed to by organisations of the Soviet Union. Alphabetical list ofor the year...
Part II : Index of publications, subscribed to by organisations of the Soviet Union. Systematic list for the year....
Part III : Index of periodicals for the year.... taken by libraries and scientific/technical organisations of the Soviet Union (Alphabetical Catalogue).

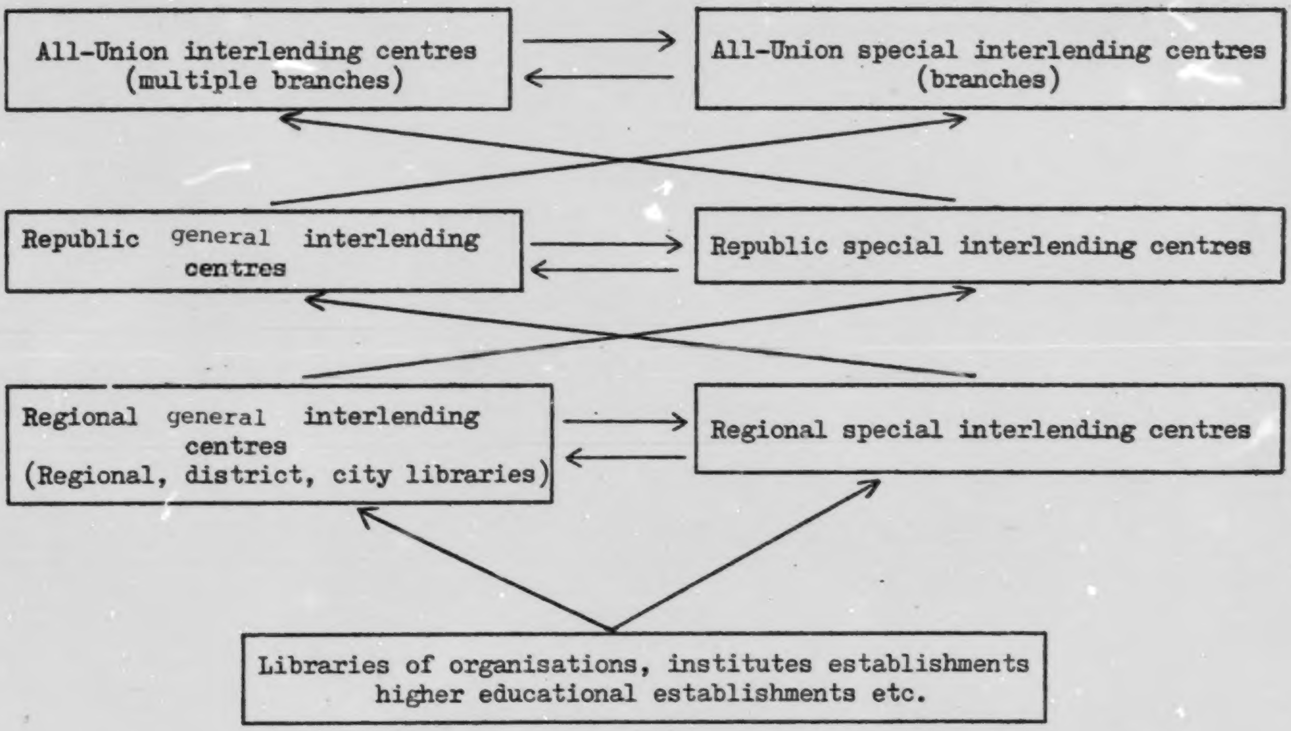
Each year information is added to the data base on 75,000 foreign books and 20,000 foreign periodicals taken by 1,200 libraries and information centres of the country. Union catalogues of books are published monthly and union lists of serials once a year.

In the field of the Social Sciences and Humanities a union bulletin of new foreign books sent out to the major Soviet libraries is published bi-monthly (Publication of the All-Union State Library of Foreign Literature).

Along with the printed union catalogues, the Lenin State Library maintains an all-Union union catalogue on cards for all subjects:

- Union catalogue of foreign books (1 million cards)
- Union list of foreign periodicals (100,000 cards)
- Union catalogue of the Russian book 1800-1947 (1 million cards)

The single all-state interlending system of the U.S.S.R.


All-Union interlending centres (multiple branches)
All-Union special interlending centres (branches)
Republic general interlending centres
Republic special interlending centres
Regional general interlending centres (Regional, district, city libraries)
Regional special interlending centres
Libraries of organisations, institutes establishments higher educational establishments etc.

Source:

Arutiunov, N. Head, Directorate for Scientific and Technical Information.

Personal communication 26th April 1978.

UNITED KINGDOM

Interlending in the U.K. is conducted on a number of levels.

Firstly there are local schemes, in which activity is usually co-ordinated by central public libraries. Membership is normally open to all libraries of the area and may include those of industrial and commercial firms, college libraries, public libraries, libraries of research associations, etc. Activities may include the production of local union lists of serials, arranging seminars and acting as information centres for referring enquiries.

Secondly, there are seven regional library systems covering the whole of England, and one each for Scotland and for Wales. The headquarters of these systems are usually located within a public library. Membership of such schemes includes all public libraries, in the region, with some academic and special libraries. The regions maintain union catalogues in card or sheaf form, together with lists of publications arranged by ISBN which are produced in computer output microform.

Thirdly, there is the British Library Lending Division (BLLD). Libraries wishing to use the Lending Division must become registered borrowers and agree to observe certain regulations. There are 5,300 registered borrowers in the U.K., and 3,500 registered overseas organizations. The Lending Division aims to acquire all significant serials, irrespective of subject matter or language of publication, all significant English language monographs, music scores, United Kingdom government publications and those of certain international agencies, conference proceedings, and all unclassified report literature. Foreign language monographs are bought, where possible, in response to requests that cannot be satisfied from stock or for which no locations can be found in the U.K. The Lending Division maintains a Union Catalogue of Books which includes copies of entries from regional union catalogues and entries from individual libraries; its intake is now restricted to foreign language books and older English language books acquired by about 70 major libraries. A microfilm of the combined regional ISBN lists is also maintained. Requests which cannot be satisfied from stock or for which no locations can be found in the union catalogue may be sent on to libraries benefitting from legal deposit and other major libraries that have agreed to receive requests from the Lending Division.

A variety of channels may be used for directing requests. A library may approach another directly, either speculatively or on the basis of published information such as the British Union Catalogue of Periodicals or the regional ISBN lists, local union lists, or familiarity with subject specialization schemes. A member of a local scheme may apply to headquarters for information, or with a request which is then forwarded to another member. Similarly at the regional level members may apply to regional headquarters and the request will be forwarded to a holding library or returned to the requesting library with locations. Headquarters may also forward requests speculatively or to a specializing library if a subject specialization scheme exists within the region.

The British Library Division receives requests either directly from individually registered libraries or from regional headquarters if no locations can be found within a region. Borrowers may specify the extent of search required for an item. This may be limited to a search of the stock of the Lending Division, or include the provision of locations, the sending of a request to supporting libraries or the provision of speculative locations. Requests for foreign publications may be sent abroad if no locations can be found in the U.K.

Requests are received by post, Telex and computer. Until 1973 virtually all loans were despatched by post, but since 1973 non-postal transport schemes have been established in seven regions serving some or all of the libraries of the region; most of these schemes have direct links with the British Library Lending Division. These schemes have been found to be both faster and cheaper than postal services, and it is intended to develop and co-ordinate them to provide a total national network.

About 3,250,000 interlibrary loan requests were made in 1976/77, 78% of them to the British Library Lending Division. Data on the use made of the various channels, satisfaction levels and speed of supply may be found in Annex 3.

UNITED STATES OF AMERICA

This country displays a wide variety of interlending services which range from an informal decentralized pattern to formalized central pools of commonly owned and used collections. The role of formal regional networks, and national, regional or local centres of excellence is very important.

There is a National Interlibrary Loan Code, the last edition of which was published in 1968, and an Interlibrary Loan Procedure Manual which appeared in 1970. The American Library Association (ALA) has an Interlibrary Loan Committee.

A number of States have established their own interlibrary loan codes. The interlibrary loan form of the American Library Association is generally used throughout the country.

On the basis of location information provided by a number of union catalogues with either national or regional coverage, libraries apply directly to the holding libraries.

Examples of interlending arrangements that exist in the USA:

Center for Research Libraries (CRL)

It is located on land donated by the University of Chicago. It was organized in 1949 by ten university libraries in eight states as the Midwest Inter-Library Center. In 1961 the centre dropped all geographic restrictions on membership and a few years later it changed the name to the present one.

It is a independent, non-profit organization, with over 100 members and associate members in the USA and Canada. It provides two basic services:

- storage centre for infrequently used materials and

- large-scale acquisition of certain well-defined bodies of infrequently used research material for the joint benefit of its member institutions; for example, a wide variety of microform archives, all the current and retrospective publications of the Soviet Academy of Sciences, current subscriptions to some 7,000 infrequently used scientific journals, any foreign or domestic doctoral dissertation requested by a member, the documents of the fifty States, etc.

The CRL has two classes of members, designated as "members" and "associate members". The first are those institutions that have libraries with at least 500,000 volumes and that have spent an average of $ 200,000 per year for the last five years on the acquisition of books, periodicals, other materials, and binding. The institutions whose libraries do not meet both of these qualifications are associate members.

Membership fees are determined annually by formula. For example, in 1971/72 this fee for the "members" category ranged from $ 4,620 to $ 16,493.

Both kinds of members have the same right of access to collections and services of the CRL. Non-members may borrow materials from the Center occasionally, but any library making regular and continuing use of the CRL must become a member in order to continue such use.

Materials are usually sent to the users in their original form. In special cases and when specifically requested the Center provides copies of requested materials.

The Center now holds over three million volumes in the original printed format, plus several hundred thousand volumes in microform of scarce older printed works and manuscript archives.

The Center has published an eight volume printed catalogue of monographs, serials and newspapers. A copy of this catalogue is provided without cost to each member, but associate members have to pay a price to cover the cost of printing. A handbook describes the main collections and services provided by the Center.

Regional Medical Library Program (RMLP)

This aims at providing rapid and efficient delivery of documents for US medical libraries. It is a hierarchical system with each higher level facility acting as a back-up resource to the echelon below. At the first level, which corresponds to the basic unit, are found the community hospitals, colleges and junior colleges with meaningful health science education and training programmes, and other health-related schools, research organizations or governmental agencies. The second level is made up of selected institutions with meaningful resources that are designated as resource libraries, usually libraries of medical schools. The third level corresponds to the Regional Medical Library. The fourth level corresponds to the National Library of Medicine which is responsible for: network management and control, national coordination of planning, back-up resource for the regional medical libraries, and act as a regional medical library for the mid-Atlantic states.

There were in 1975 eleven regional medical libraries covering defined geographic regions.

Other networks

The Bibliographic Center for Research, located in Colorado, covers the states of Arizona, Colorado, Iowa, Kansas, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Utah, and Wyoming.

The Ohio College Library Center has about sixty member libraries within Ohio and services also extended to the New England Library Information Network (NELINET), five Associated University Libraries in upstate New York (FAUL), South Eastern Library Network (SOLINET), and the Pennsylvania Area Library Network (PALINET). As a by-product of current cataloguing done by OLCL members an on-line union catalogue is created. The system was planning to implement the automatic transmission of an interlibrary loan request to the member library whose holding of a given title is indicated in the data base.

Several other networks which provide interlending services and which are organized on a state basis exist. Some of these are: the Illinois Interlibrary Loan Network, the Interlibrary Communication Network based on Indiana, the Minnesota Interlibrary Teleype Exchange (MINITEX), the New York State Inter-Library Loan (NYSILL), and the Pittsburgh Regional Library Center, Inc.

The Periodical Bank of the Associated Colleges of the Midwest (ACM)

This is an example of a different approach to the provision of fast access to documents on a co-operative basis. It was originally supported by ten relatively small private liberal arts colleges, operating an interlending service to its members. It is able to fill 98% of the requests for photocopies from its own collections. It seeks to retain only the most heavily used periodicals in its collection, and relies on other libraries in the Chicago area for the less frequently used titles.

The role of the three national libraries in providing access to documents cannot be underestimated, particularly the interlending services of the National Library of Medicine and the National Agricultural Library.

The implementation of a National Periodicals System in the USA is being examined by the National Commission on Libraries and Information Science. The proposed system will consist of three levels:

1. State and regional centres to satisfy some 80% of the demand for the loan of periodicals;
2. A dedicated centre to co-ordinate the whole system and lend most of what the first level cannot provide;
3. The level of last resort, at which a group of selected major research libraries satisfies the last 5% of demand.

The second level will be under the responsibility of the Library of Congress where a National Periodicals Centre will be established. This centre will be developed from donations and will begin operating in 1978 or 1979 with some 50,000 subscriptions.

Union catalogues:

As mentioned above there are a number of union catalogues in the USA at the national, regional and local level. Only the most important national union catalogues will be mentioned here.

- *National union catalogue, 1952-1955 imprints.* Ann Arbor, Edwards, 1961. 30 v.
- *National union catalog, pre-1956 imprints.* London, Mansell, 1967- To be completed in 1979 in 610 volumes, containing some 13 million entries.
- *National union catalog: a cumulative author list.* 1956- It is published in nine monthly issues, three quarterly cumulations, and annual and quinquennial cumulations.
- *Union list of serials in libraries of the United States and Canada.* 3rd ed. New York, H.W. Wilson, 1965. 5 v.

– *New serial titles; a union list of serials commencing publication after December 31, 1949. 1950–1970 cumulative.* New York, Bowker, 1973. 4 v.

It appears in eight monthly issues, four quarterly issues, and annual cumulations. The latter are cumulated over five– or ten–year period.

Sources:

Center for Research Libraries. *Handbook*. Chicago, 1973. 122 p.

Lucht, Irma and Stewart, Blair. The ACM Periodical Bank and the British National Lending Library: contrasts and similarities. In: SPYERS-DURAN, P. & GORE, D., eds. *Management problems in serials work.* Westport, Greenwood Press, 1974, p. 3–18.

Rouse, Sandra H. A selected review of the literature on interlibrary loan networks. *Network*, 2 (1) 1975, 17-25.

YUGOSLAVIA

Library interlending is decentralized, but in each republic (six), and in each province (two) there is a centralized interlending system for different types of libraries. The degree of centralization varies greatly from one republic to another.

Every republic maintains a union catalogue of foreign monographs and periodicals held in its libraries. This union catalogue is usually located in the national library and under its control. A copy of each card for every book and journal registered in any of the collaborating libraries is sent to the Yugoslav Bibliographic Institute in Belgrade, which compiles the union catalogue of foreign literature for the whole of Yugoslavia.

There are also regional union catalogues of national and foreign literature, as well as union catalogues covering the holdings of libraries within a city or within a college. For example Union catalogue of libraries of Belgrade University libraries which cover 32 libraries with holdings of about 2 million books.

Union catalogues:

Centralni katalog stranih serijskih publikacija for 1975, with about 13,500 titles, is a printed union Catalog of current foreign journals covering all main research libraries. Former title of volumes of the printed catalogue :. Katalog tekuce strane periodike u bibliotekama Jugoslavije 1957 -

Centralni katalog stranih knjiga

It is maintained on cards by the Jugoslovenski bibliografski Institut. It covers foreign publications published after 1919 and numbers more of 3,500,000 titles of foreign books.

Centralni katalog strane periodike.

A catalogue on cards maintained by the same institute as above. It includes 60,000 titles of foreign periodicals.

Source:

Hanz, B. Interlending systems in Yugoslavia. Paper presented at the Western European Seminar on Library Interlending. Banbury, 10-15 March 1973.

Savic, L. Director, Yugoslavian Bibliographical Institute. Personal communication 21st March 1978.

'Interlibrary loans programmes have proved to be more difficult to establish largely because of communications problems and lack of bibliographical tools. It has been agreed that loans between West African countries take a longer time than those between an African state and the Bibliothèque Nationale or the British Lending Library. The cost of photocopying in African countries could be quite prohibitive owing to the high import duty imposed on photographic paper and chemicals. For these reasons, apart from instituting inter-library loans within the institutions in one country, it was considered to be more economic and more efficient to continue to use the services provided by the Bibliothèque Nationale for the Francophone countries and the British Lending Library for the Anglophone.

'Loans could therefore be limited to the local materials produced in each country, and materials published outside Africa which could neither be obtained from Paris nor Boston Spa. Meanwhile, a Union List of Serials in West African university libraries forms a major project for the Standing Conference of African University Libraries.

Source:

Sheriff, G.M. Resource sharing in West Africa: some implications for the development of national information policies. IFLA/UNESCO Pre-Session Seminar for Librarians from Developing Countries. Antwerp, 1977.

PRINCIPLES OF NATIONAL INTERLENDING SYSTEMS

This paper, published in Interlending review (Boston Spa), vol. VI, no. 2, April 1978, 50-53, is included as expressing concisely many of the main points made in the report.

PRINCIPLES OF NATIONAL INTERLENDING SYSTEMS

Maurice B. Line and Stephen Vickers

Physical access to material has largely been taken for granted but as interlibrary lending has increased so the design of interlending systems needs to be examined. 21 principles of interlending systems that are likely to be valid in the great majority of countries are listed, each with a brief introduction. It is hoped that the principles will provoke thought and discussion and perhaps improvements in interlending systems.

To provide access to documents is the main function of libraries. Much of the literature of librarianship has been concerned with bibliographical rather than physical access, which is largely taken for granted. The greatly increased volume of publication in recent years has stimulated major improvements in bibliographical access, which have in turn encouraged an increase in demands for documents. The same increases in publication and in demand have led to a decline in the self-sufficiency of local libraries, which have consequently had to rely much more on the resources of other libraries to serve their users. All developed countries have seen great increases in inter-library lending in the last 10 or 20 years, even though demand in many countries appears to have been severely constrained by the inadequacy of present interlending systems. Only recently has it been seen as necessary to look at interlibrary lending as an essential element in the library system of any country, and to design interlibrary lending mechanisms and procedures as a coherent system.

Although much work needs to be done on the optimal design of interlending systems, and systems will in any case differ according to local needs and circumstances, existing experience suggests a number of principles that are likely to be valid in the great majority of countries. These are set out below, in the hope that they will provoke thought and discussion, and perhaps action in some countries. The case for each principle is presented very briefly; full presentation of the arguments would have resulted in an extensive document.

Availability of documents is an international as well as national problem, but international availability must depend on effective national lending systems.[1]

The attention of readers is drawn to a parallel paper on 'Principles of International Lending', published in 1977.[2]

1. Criteria for national lending systems

The three criteria by which national lending systems must be judged are:

Satisfaction level (proportion of requests satisfied)
Speed of supply
Economics.

The relative importance of these criteria may differ for different categories of document and user: for example, speed may be so important in some cases that cost is unimportant. In the general design of the system all three criteria are important, and an optimal balance should be sought between them, though the system should be such that in particular cases one criterion can be maximised at the expense of one or both of the others.

2. Analysis of the problem

The problem must first be analysed systematically. This is the prerequisite of progress: until the size and nature of the problem have been studied, few systematic improvements can be made with confidence.

The first step should be the collection of data on existing interlibrary loan demand and supply. Data should ideally be collected on:

*volume of demand
source of demand (type of library, geographical distribution, etc)
*form of document (eg serial, monograph, etc)
country of publication
date of publication
subject of document
channel used for requesting
*source of supply
*satisfaction level
*speed of supply.

Extensive cross-tabulation is required, eg satisfaction level for different forms of document with different dates of publication. For journals, titles should be ranked in order of the number of requests they receive, and the number needed to satisfy 70%, 80% and 90% of requests identified.

In many countries it will be difficult to collect some of the data ideally required, and in some countries most of the information may be unobtainable. In such cases, the basic statistics (starred) should be collected: they may prove quite sufficient for planning purposes. Planning should certainly not await the comprehensive collection of statistics.

The second stage is to identify possible alternative solutions, and compare them for cost and effectiveness (effectiveness being judged according to satisfaction level and speed of supply). All costs should be taken into account, including indirect costs and overheads. Systematic analysis often suggests measures that result in dramatic improvements yet are simple and economic to implement. It is likely that different solutions will be required for serials and other forms of material.

The third stage is to study how the best solution can be reached from the present situation with a minimum of disruption and cost. It will usually be wisest to start with journals and recent publications, since it is on these that most demand normally falls.

The system must take account of the fact that interlibrary loan demand may be severely restricted by inadequacies in the present system, and that an improved system will probably uncover a large latent demand, which may also change the nature of demand to some extent.

3. Service to all kinds of library

An interlending system should be designed to serve all kinds of library. A system designed to serve one kind only can almost certainly serve the needs of other kinds also; separate systems duplicate effort and may greatly increase cost.

4. Unity of knowledge

Systems should normally be designed to make provision in all subjects and languages. Knowledge cannot for practical purposes easily be broken down by subject, language or country of publication. An interlending service designed to satisfy needs in science and technology (usually the area to which attention is first given) will need to provide much social science material (eg industrial psychology, management and economics), and the resulting system would not require much extension to cover the humanities, between which and the social sciences there is in any case no clear dividing line. It may also be difficult to design economic systems to cater separately for the humanities and/or social sciences. There is even less case for differentiating by language or country or publication. Interlending systems that are built on the basis of strong collections specialised by subject or language should be co-ordinated to make between them total provision.

5. Relation to the interlending systems of other countries

The design of the interlending system should take account of the interlending systems of neighbouring and other countries. For example, a neighbouring country may have a comprehensive collection of some category of material on which reliance can be placed, or it may be worth developing the national system to give a service to other countries. Cultural and linguistic affinities may make close co-operation possible, especially in the case of some emerging nations that once formed larger units.

6. Supply of national imprints

The national interlending system should be able to supply all publications of the country, both within the country and to other countries. This is a cardinal principle of Universal Availability of Publications (UAP),[1] since each country is an obvious, and sometimes the only, source of its own publications. Interlending systems should be designed initially to ensure comprehensive availability of publications issued from a given (recent) date, and then to improve retrospective availability: the means of ensuring current and retrospective availability may well be different (eg central loan collections can provide current publications but not all older publications).

7. Compatibility with other countries

National interlending systems should as far as possible be designed to link with those of other countries, to simplify international transactions; though they may have different structures, they can have forms and procedures which make it easier to send unsatisfied requests abroad (see 13 and 14 below).

8. Interlibrary borrowing versus local acquisition

Libraries should not borrow items from other libraries when it is more economic to buy them. An interlending system is a supplement to local provision, not an alternative. The relative costs, which should take into account staff time, overheads and storage, will depend to a large extent on the expected use of an item. In particular cases however interlibrary borrowing of an item may be necessary because of the delay likely to be incurred in purchase.

9. Adequate satisfaction level
Any developed country should aim to satisfy at least 70% of the interlibrary loan demand in that country, preferably 80%. It seems likely that levels lower than 70% are unsatisfactory for users, because of the probable delays in obtaining items from abroad, and in the long term uneconomic, because dependence on other countries beyond a certain point is more expensive than provision within the country.

10. Fast response
All requests should be responded to quickly, whether or not they can be met. The need to make repeated application is a major cause of delay, and it is therefore all the more important to reply quickly to requesting libraries when items cannot be supplied or when there is likely to be serious delay in supply.

11. Equal priority for local and distant users
All libraries should give interlibrary loan requests the same priority as requests from local users. Since delay is bound to occur in sending requests and in sending items, local delays must be cut to an absolute minimum. The most serious delays in interlending in many countries occur not in transmission but in the requesting and (especially) the supplying libraries.

12. Minimal number of channels
Requests should go through as few channels as possible, and those channels offering the best chance of success should be used first. First-time success is very important in determining speed of supply: repeated requesting is slow and expensive. Also, the fewer libraries that are used as sources of supply the more they can gear themselves to offer a satisfactory service, and the more easily the system can be controlled; demand should therefore if possible be concentrated on a few libraries, although it may be necessary to call on the resources of others for a limited proportion of requests.

13. Simple standard procedures
Procedures should be as simple and standardised as possible, and designed to save time. For example, self-addressed labels can be sent with requests, or made part of a standard request form. It is clearly simpler and easier for both requesting and supplying libraries if standard procedures are used throughout the country.

14. Standardised request forms (and other stationery)
Request forms should be standardised, as should other forms concerned with interlending (eg recalls). Time is wasted both in requesting and supplying libraries if a variety of forms is in use. Standard forms can be cheaply and centrally produced. It may be beneficial to design forms that can be used if necessary for requests to other countries, or that are similar in design.

15. Simple accounting
Costs of individual transactions (postage etc) should never be reclaimed: the cost of reclaiming often approaches, or exceeds, the amount reclaimed. Either no money should change hands (eg on the principle of reciprocity or in a Government-subsidised lending scheme); or requests should be made on a pre-paid basis using flat rate charges, making it possible to buy coupons in bulk in advance or to use deposit accounts. Receipts, whether for payment or for documents lent, should never be required except in the case of items of special value or rarity.

16. Payment to supplying libraries
Means should be found of compensating net lenders. Few libraries lend and borrow equal numbers of items, and unless there is direct Government subsidy, net lenders will be subsidising net borrowers. Reimbursement will normally mean payment by net borrowers, who will thus have a direct incentive to improve their local availability (see 8 above). Unless payment is made, the relatively small number of libraries that satisfy most demand will tend either to give a poor service, or to restrict lending; it is unfair to expect them to give a good fast service free. Payment both enables and obliges them to give a good service. (It should be noted that the proposed National Periodicals Bank in the USA will endeavour to recover costs, and that a major factor leading to the proposal was the excessive burden carried by a few libraries.) In any case, interlibrary borrowing is never 'free': costs in the borrowing library (staff, stationery, return of borrowed items, etc) probably amount to between two-thirds and three-quarters of total interlibrary borrowing costs. Moreover, interlibrary borrowing is usually very cheap compared with alternative means of obtaining rarely wanted material.

17. Minimal union catalogues
Union catalogues should be kept to a minimum — of catalogues, and of libraries covered. Few union catalogues are up to date either for additions or deletions, and recent publications, for which demand is often heavy, are especially unlikely to be recorded. Moreover, union catalogues are costly to produce and maintain, and costly to use if numerous lists have to be consulted. Systems dependent upon large numbers of current union catalogues are unlikely to be efficient.

18 Communications
Systems should be designed to take account, and advantage, of modern communications systems. For

requests, telex, telefacsimile and computer transmission should be considered; for the actual items themselves, all available means of transport (post, rail, road), must be borne in mind, particularly where large distances are concerned.

19. **Flexibility**

The system must be capable of change. It must be able to adjust to changes in the volume and nature of demand; in particular, it must be capable of large and rapid expansion if required. (If it is a good system, it will probably generate greatly increased demand.) It must also be adaptable to changes in the form of primary publication (eg on-demand publication from microform), and in communications technology (see 18 above).

20. **Monitoring of the system**

The performance of the system should be regularly examined. This is necessary to study trends (in the growth and nature of demand), and to identify and remedy deficiencies. Basic statistics (eg volume of demand and basic satisfaction level) should be collected systematically as a matter of routine, and supplemented by special surveys for particular purposes, (eg satisfaction levels for different categories of material).

21. **Law of diminishing returns**

Beyond a certain point, extension and enhancement of elements in the system produce negative results. The law of diminishing returns applies to almost every aspect of interlending (and indeed of library practice in general). To give a few examples: Beyond a certain point, the addition of new libraries to union catalogues adds few entries in relation to the extra cost. Beyond a certain level of national availability, it is often cheaper and easier to apply to another country than to improve the national stock. With libraries, basic systems should be designed to handle the large bulk of requests quickly, the rest being dealt with as exceptions.

Acknowledgement

This paper benefited from contributions and criticisms by Keith Barr, Jim Davey, Sidney Smith, Donald Urquhart and David Wood.

References

1. Line, Maurice B. Universal availability of publications. *Unesco Bulletin for Libraries*, 1977, **31** (3), 142–151.
2. Line, Maurice B. Principles of international lending and photocopying. *International Library Review*, 1977, 9 (3), 369–379.

BIBLIOGRAPHY

ADEYEMI, N.M. A selected review of the literature on library co-operation. International library review (New York), vol. VIII, no. 3, 1976, p.283-297.

ADKINS, E.F. An analysis of interlibrary loans for September 1963 through August 1964 at the Medical and Nursing Library of Scott and White Memorial Hospital of Temple, Texas. Texas libraries (Austin, USA), vol. XXVIII, no. 3, 1966, p.112-117.

AJE, S.B. Cooperative acquisition programme in Nigeria. Paper presented at the IFLA/UNESCO Pre-Session Seminar for Librarians from Developing Countries. Antwerp, 1977.

AJE, S.B. Inter-library lending in Nigeria, existing conditions and climate. Paper presented at the 42nd General Council of IFLA. Lausanne, 1976.

ALADEJANA, A. Library cooperation in Nigeria: cooperation in reference and loan services. Nigerian libraries (Lagos), vol. VIII, no. 3, 1972, p.157-162.

ALLARDYCE, A. et al. Provision for the humanities by the BLLD. BLL review (Boston Spa), vol. III, no. 4, 1975, p.89-94.

ALTMAN, E. Implications of title diversity and collection overlap for interlibrary loan among secondary schools. Library quarterly (Chicago), vol. XLII, no. 2, 1972, p.177-194.

ALTMAN, E. Independent study and interlibrary loan in secondary school libraries. School libraries (Chicago), vol. XXI, no. 1, 1971, p.36-42.

ARMS, W.Y. *A study of interlibrary lending in Great Britain, with emphasis on the use of computers*. D.Phil. thesis, University of Sussex, 1973.

ASCHIM, E. 'It ain't what you borrow - but what you don't have to own': the Center for Research Libraries, Chicago (CRL). (In Norwegian.) *Bok og bibliotek* (Oslo), vol. XLII, no. 3, 1975, p.90-94.

ASCHIM, E. PNBC: et bibliografisk senter i de nord-vestlige statene i USA. *Bok og bibliotek* (Oslo), vol. XLIII, no. 3, 1976, p.152-157.

ATWOOD, R. An anemometer for ILL winds. *College and research libraries* (Chicago), vol. XXIX, no. 4, 1968, p.285-291.

AUSTRALIA. Scientific and Technological Information Services Enquiry Committee. *The STISEC report: report to the Council of the National Library of Australia by the Scientific and Technological Information Services Enquiry Committee, May 1973. v. 1. Scientific and technological Information services in Australia*. Canberra, National Library of Australia, 1973. 40p.

AUSTRALIA. Scientific and Technological Information Services Enquiry Committee. *The STISEC report: report to the Council of the National Library of Australia by the Scientific and Technological Information Services Enquiry Committee, May 1973. v. 2. Procedures, evidence examined, findings and appendixes.* Canberra, National Library of Australia, 1975. 376p.

Der AUSWÄRTIGE Leihverkehr in Nordrhein-Westfalen 1974. *Mitteilungsblatt, Verband der Bibliotheken des Landes Nordrhein-Westfalen* (Munich), vol. XXV, no. 4, 1975, p.305-316.

BARNHARD, N.K. Biomedical communications network and interlibrary loans in Arkansas. *Arkansas libraries* (Little Rock, USA), vol. XXXIII, no. 4, 1976, p.5-10.

BARR, D. & FARMER, J. Waiting for inter-library loans; report of a study on the use made of the services of the BLLD with particular reference to the effects of delay on the users of a medical school library. *BLL review* (Boston Spa), vol. V, no. 1, 1977, p.8-12.

BARR, K.P. Changing attitudes towards the NLL. In: BARR, K. & LINE, M., (eds.). *Essays on information and libraries: festschrift for Donald Urquhart*, p.29-42. London; Clive Bingley, 1975. 211p.

BARR, K.P. NLL serial collection. *BLL review* (Boston Spa), vol. I no. 1, 1973, p.3-5.

BARR, K. Systems and procedures at the BLLD. *BLL review* (Boston Spa), vol. IV, no. 3, 1976, p.71-78.

BEACOCK, E.S. The development of an information network. *Ontario library review* (Toronto), vol. LII, no. 4, 1968, p.199-202.

BEACOCK, E.S. Library networks in the '70s; public libraries. *Canadian library journal* (Ottawa), vol. XXXI, no. 3, 1974, p.192-196.

BECKER, J. & HAYES, R.M. A system for Inter-Library Communication (SILC). *Network* (Tempe, USA), vol. I, no. 10, 1974, p.21-22.

BIBLIOTEKERNES indbyrdes lån: interurbanudvalgets betankning. København, Bibliotekscentralen, 1970. 45p.

BLASINGAME, R. *Feasibility of cooperation for exchange of resources among academic and special libraries in Pennsylvania.* Philadelphia, Pennsylvania State University, 1967. 28p. ED 016 495.

BOWER, C.A. Patterns of use of the serial literature at the BLLD. *BLL review* (Boston Spa), vol. IV, no. 2, 1976, p.31-36.

BRANDES, H. Zwei Jahre Kurierdienst der WAB Potsdam. *Bibliothekar* (Leipzig), vol. XXV, no. 11, 1971, p.763-769.

BRAUDE, R.M. & HOLT, N. Cost-performance analysis of TWX-mediated interlibrary loans in a medium-sized medical center library. *Bulletin of the Medical Library Association* (Chicago), vol. LIX, no. 1, 1971, p.65-70.

BRAUN, H. Die Denkschrift der Deutschen Forschungsgemeinschaft zur überregionalen Literaturversorgung; Möglichkeiten der Realisierung. *Zeitschrift für Bibliothekswesen und Bibliographie* (Frankfurt am Main), vol. XXIII, no. 2, 1976 p.71-77.

BRAUN, H. Planungen der Deutschen Forschungsgemeinschaft für ein Gesamtsystem der Literaturversorgung in der Bundesrepublik. *Zeitschrift für Bibliothekswesen und Bibliographie* (Frankfurt am Main), vol. XIX, no. 4/5, 1972, p.361-368.

BROCHOCKA, I. Wypozyczalnia miedzybiblioteczna w bibliotekach glownych akademickich szkol technicznych. *Roczniki biblioteczne* (Wroclaw), vol. XV, no. 1-2, 1971, p.225-254.

BUCKLAND, M.K. The quantitative evaluation of regional union catalogues. *Journal of documentation* (London), vol. XXIII, no. 1, 1967, p.20-27.

BUNN, R.M. How it all began. *BLL review* (Boston Spa), vol. II, no. 3, 1974, p.75-7

BURGEMEISTER, B. Kurierwagen im Leihverkehr. *Zentralblatt für Bibliothekswesen* (Leipzig), vol. 85, no. LXXXV, no. 5, 1971, p.257-264.

BURGETOVA, J. Den interurbane lånevirksomhed i Tjekkoslovakiet. *Reol* (Ballerup), vol. VI, no. 4, 1967 p.218-223.

BUSHA, C.H. & LANDRUM, J.H. *Telefacsimile communication with the Xerox Magnavox telecopier in reference and ILL: a report of a three-month experimental demonstration conducted by the South Carolina State Library Board.* Columbia, South Carolina State Library Board, 1967. 26p. ED 026 074

CANADIAN UNION CATALOGUE TASK GROUP. *Final report to the National Librarian of Canada*. Ottawa, National Library of Canada, 1976. 86p.

CATALOGUE COLLECTIF SUISSE. *Le prêt interbibliothèques*. Berne Bibliothèque Nationale Suisse, 1975. 120p.

CHOATE, R. Do you borrow what you hold? *Australian academic and research libraries* (Bundoora), vol. VII, no. 4, 1976, p.261-262.

CHOLNOKY, G. A kõnyvtárkõzi kõlcsonzēn helyzete ēs problémãi Magyarorszagon. *Kõnyvtari figyelö* (Budapest), vol. XX, no. 4, 1974, p.295-310.

CHRISTOPHERS, R.A. The LASER union catalogue and a national ISBN interlending system. *Program* (London), vol. VII, no. 2, 1973, p.89-95.

CLAPP, V.W. Public libraries and the network idea. *Library journal* (New York), vol. XCV, no. 2, 1970, p.121-124.

CLEMENTS, D.W.G. Survey of inter-library lending in eight local areas. *Journal of librarianship* (London), vol. I, no. 2, 1969, p.107-118.

COPYRIGHT legislation now permits interlibrary loan. *Library journal* (New York), vol. CI, no. 11, 1976, p.1240.

CORNISH, G.P. Provision for philosophy and theology at the British Library Lending Division. *Bulletin of the Association of British Theological and Philosophical Libraries* (Edinburgh), New series no. 5, 1976, p.12-16.

COSSAR, B. Interlibrary loan costs: academic library study. *RQ* (Chicago), vol. XXII, no. 3, 1973, p.243-246.

CRABB, P. Interlibrary loan: the painless way. *Arkansas libraries* (Little Rock, USA), vol. XXXIII, no. 1, 1976, p.28-29.

CROSBY, T.K. Obtaining literature through interlibrary loan. *New Zealand libraries* (Wellington), vol. XXXVI, no. 6, 1973, p.333-338.

DAHLØ, R. Interlending in Scandinavia; four library systems in transition. *BLL review* (Boston Spa), vol.III, no. 4, 1975, p.98-103.

DAVEY, J. Interlending developments at the NCL. *National Central Library newsletter* (London), no. 12, 1972, p.5-6.

DAVEY, J. Interlibrary lending around the world - a review of recent papers. *BLL review* (Boston Spa), vol. III, no. 3, 1975, p.77-79.

DAVEY, J. Regional round-up. *BLL review* (Boston Spa), vol. II, no. 4, 1974, p.111-114.

DAVEY, J. Regional round-up. BLL review (Boston Spa), vol. III, no. 4, 1975, p.95-97

DAVEY, J. Regional round-up. BLL review (Boston Spa), vol. IV, no. 4, 1976. p.108-111.

DeBUSE, R. Interlibrary access among the Worcester area cooperating libraries 1970-71. Part A: Interlibrary loan and shuttle. Massachusetts, Worcester Area Cooperating Libraries, September 1971. 92p. ED 060 877.

De GENNARO, R. Austerity, technology, and resource sharing: research libraries face the future. Library journal (New York), vol. C, no. 10, 1975, p.917-923.

DOWGIALLO, I. Wypozyczanie miedzybiblioteczne w bibliotekach Szezecina. Roczniki biblioteczne (Wroclaw), vol. XVIII, no. 1-2, 1974, p.429-444.

DUNLAP, L.W. National and regional lending libraries. In: SPYERS-DURAN, P. & GORE, D. (eds.) Management problems in serials work. Proceedings of the conference held at Florida Atlantic University, Boca Raton, Florida, March 26-27, 1973, p.19-35. Westport, Conn. Greenwood Press, 1974. 145p.

ELLIS, R. et al. NIL: a study of unfilled inter-library loan requests in the NYSILL system. Washington, Nelson Associates Inc., 1970. 190p. ED 047 766

EVANS, G.T. Delivery of services. In: KENT, A. (ed.) Resource sharing in libraries: why, how, when, next action steps. p.129-136. New York, Marcel Dekker, 1974. 393p.

FAWCETT, T. The availability of art and design publications in libraries and through inter-library loan services. ARLIS newsletter (Art Libraries Society) (Preston, England), no. 23, 1975, p.8-13.

FEW academic libraries charging fees. Library journal (New York), vol. CII, no. 7, 1977, p.752.

FIELDING, F.D.O. ALBIS in eclipse. Australian academic and research libraries (Bundoora), vol. VII, no. 2, 1976, p.65-70.

FILON, S.P.L. The Regional Bureaux and the NLL: a reply to Dr. Urquhart. Library Association record (London), vol. LXXII, no. 2, 1970, p.46-48.

FILON, S.P.L. & GIBB, I.P. Inter-library lending: results of a survey of N.C.L. loan requests. Library Association record (London), vol. LXVIII, no. 8, 1966 p.289-294.

FILON, S.P.L. & McCLELLAND, W.R.M. The National Central Library and the East Midland Regional Library System. Journal of librarianship (London), vol. II, no. 4, 1970, p.263-271.

FORSLAG om bibliotekernes indbyrdes lån; redegørelse fra Rigsbibliotekaren og Biblioteksdirektøren. Bogens verden (Copenhagen), vol. LIV, no. 9, 1972 p.620-625.

FRANKLIN, R.W. & MacDONALD, C.I. Washington library network. Special libraries (New York), vol.LXVII, no. 2, 1976, p.84-90.

FREEMAN, C. Inter-library loans. Australian library journal (Sydney), vol. XXII, no. 11, 1973, p.462-466.

FUSSLER, H.H. Shared resources, photocopying, and facsimile transmission. In: FUSSLER, H.H. Research libraries and technology: a report to the Sloan Foundation. p.33-50. Chicago, University of Chicago Press, 1973, xi, 91p.

GARDE, M. Den interurbane lånestruktur. *Bogens verden* (Copenhagen), vol. LIV, no. 4, 1972, p.232-237.

GATENBY, J. Our ILL (ill?) network. *Australian library journal* (Sydney), vol. XXV, no. 8, 1976, p.219.

GITTIG, H. Der Leihverkehr der DDR unter besonderer Berücksichtigung der Stellung der Deutschen Staatsbibliothek Berlin. *Zentralblatt für Bibliothekswesen* (Leipzig), vol. LXXXII, no. 12, 1968, p.705-714.

GODFREY, M. Cooperation - Nova Scotia style. *APLA bulletin* (Halifax, Canada), vol. XXXIV, no. 4, 1970, p.129-132.

GOLDBERG, I. (Interlibrary communications and loans in Israel. In Hebrew). *ISLIC bulletin* (Tel Aviv), vol. III, no. 2, 1971, p.74-75.

GOMES, S.S. The nature of the use and users of the Midwest Regional Medical Library. *Bulletin of the Medical Library Association* (Chicago), vol. LVIII, no. 4, 1970, p.559-577.

HALL, M.A. The Kansas Information Circuit - an introduction. Mountain Plains library quarterly (Vermillion, USA), vol. XII, no. 1, 1967, p.24-26.

HARRIS, K.G.E. & MASTERSON, W.A.J. Interlibrary book borrowing: a little analysis of services provided through the Northern Regional Library System and through the British Library Lending Division. BLL review (Boston Spa), vol. III, no. 2, 1975, p.51-54.

HASSELBERG, Inge. Interlibrary lending in Norway. Scandinavian public library quarterly (Ballerup), vol. IX, no. 1, 1976, p.24-28.

HAYES, R.M. Final report on a study of a system for inter-library communication (SILC). Los Angeles, Becker and Hayes, 1974, p.311.

HELAL, A.H. Circulation, recording and control of interlibrary loans. Libri (Copenhagen), vol. XXI, no. 1/3, 1971, p.274-283.

HELAL, A.H. Die Rolle der 'Alten Bibliotheken' bei der Literatur-versorgung für die 'Neuen Bibliotheken'. In: LOHSE, G. & PFLUG, G. (eds.). Bibliotheksarbeit heute - Beiträge zur Theorie und Praxis: Festschrift für Werner Krieg zum 65 Geburtstag am 13 Juni 1973. p.158-166. Frankfurt am Main, Vittorio Klostermann, 1973. viii, 361p. (Zeitschrift für Bibliothekswesen und Bibliographie, Sonderheft 16).

HEYDRICH, J. Arbeitsbericht des Zentralkataloges des Landes Nordrhein-Westfalen: Berichtsjahr 1973. Mitteilungsblatt, Verband der Bibliotheken des Landes Nordrhein-Westfalen (Munich), vol. XXV, no. 2, 1975, p.152-159.

HEYDRICH, J. Der auswärtige Leihverkehr der Bibliotheken in Nordrhein-Westfalen 1975. Mitteilungsblatt, Verband der Bibliotheken des Landes Nordrhein-Westfalen (Munich), vol. XXVI, no. 4, 1976, p.253-273.

HEYDRICH, J. The infrastructure of Universal Availability of Publication. National lending systems in four countries: German Federal Republic. Paper presented at the 42nd General Council of IFLA. Lausanne, 1976.

HEYDRICH, J. Interlending policies and plans in the Federal Republic of Germany. BLL review (Boston Spa), vol. IV, no. 2, 1976, p.47-50.

HEYDRICH, J. Zentralkataloge, statistische Erhebung. Bibliotheksdienst (Berlin), no. 12, 1974, p.581-593.

HEYDRICH, J. & BOECK, A. Untersuchungen zum Arbeitsaufwand der Leitbibliotheken. Mitteilungsblatt, Verband der Bibliotheken des Landes Nordrhein-Westfalen (Munich), vol. XXIV, no. 3, 1974, p.240-244.

HODGES, T.M. TWX and interlibrary loans: one library's experience. Bulletin of the Medical Library Association (Chicago), vol. LXIV, no. 3, 1976, p.299-304.

HOFIG, W. Negative Leihscheine auf ausländische Zeitungen. Zeitschrift für Bibliothekswesen und Bibliographie (Frankfurt am Main), vol. XXII, no. 3, 1975, p.215-220.

HOEVEN, H. van der. Een analyse van de aanvragen voor boeken in CC, CTC, en LBC. Open (Deventer), vol. V, no. 6, 1973, p.372-391.

HOUGHTON, B. & PROSSER, C. A survey of the opinions of British Library Lending Division users in special libraries on the effects of non-immediate access to journals. Aslib proceedings (London), vol. XXVI, no. 9, 1974, p.354-366.

HOWARD, E.N. Inter-library cooperation in the Indianapolis Metropolitan Area. *Library occurrent* (Indianapolis), vol. XXIII, no. 1, 1969, p.16-18.

ISAKSEN, K. & LINE, M. Availability of music scores requested on interlibrary loan from the NCL and Central Music Library. *National Central Library newsletter* (London), no. 14, 1973, p.8-12.

JACKSON, W.C. Telefacsimile at Penn State University: a report on operations during 1968-1969. *Library resources and technical services* (Chicago), vol. XV no. 2, 1971, p.223-228.

JACOBY, J. Regionalisierung und Direktbestellung im Fernleihverkehr. *Zeitschrift für Bibliothekswesen und Bibliographie* (Frankfurt am Main), vol. XXIII, no. 5, 1976, p.301-309.

JAKUBEKOVÁ, L. MVS - racionalizácia a zefektívňovanie služieb knižnice. *Čitadel* (Martin, Czechoslovakia), vol. XXV, no. 6, 1976, p.200-201.

KASER, D. Whither interlibrary loan? *College and research libraries* (Chicago), vol. XXXIII, no. 5, 1972, p.398-402.

KAUSHIK, B.L. A case history and analysis of interlibrary loan service in the I.I.T. Delhi Library. *Annals of library science and documentation* (New Delhi), vol. XIX, no. 2, 1972, p.52-71.

KELLER, C.D. *Union catalogs and lists: aspects of national and California coverage*. University of Illinois, Graduate School of Library Science, 1974, 36 p. (Occasional Papers, 114).

KENNEY, B.L. Network services for interlibrary loan. In: BECKER, J. (ed.). *Proceedings of the conference on interlibrary communications and information networks.* p.121-131. Chicago, American Library Association, 1971, vi, 347p.

KENNY, J. National library of Australia union catalogues. *International library review* (New York), vol. VII, no. 2, 1975, p.213-215.

KHRENKOVA, A.A. Novyi etap razvitiya mezhdubibliotechnogo abonementa v SSSR. *Biblioteki SSSR* (Moscow), no. 44, 1969, p.49-63.

KING, G. and JOHNSON, H.F. Interlibrary loan (ILL). In: KENT, A., LANCOUR, H. and DAILY, J. (eds.). *Encyclopedia of library and information science.* Vol. XII, p.196-211. New York, Marcel Dekker, 1974.

KITCHEN, P. Interlibrary loans: policies and problems. *Canadian library* (Ottawa), vol. XXII, no. 5, 1966, p.366-368.

KÖTTELWESCH, C. Überregionale Literaturversorgung von Wissenschaft und Forschung in der Bundesrepublik Deutschland; zu der gleich lautenden Denkschrift der Deutschen Forschungsgemeinschaft. *Zeitschrift für Bibliothekswesen und Bibliographie* (Frankfurt am Main), vol. XXII, no. 3, 1975, p.208-214.

KOREN, J. Interlibrary lending among academic and research libraries in Israel. *Libri* (Copenhagen), vol. XXV, no. 2, 1975, p.98-132.

KORFHAGE, R.R. et al. Graph models for library information networks. *Library quarterly* (Chicago), vol. XLII, no. 1, p.31-42.

KRIEK, W. Zum 'Nulltarif' im auswärtigen Leihverkehr. *Mitteilungsblatt, Verband der Bibliotheken des Landes Nordrhein-Westfalen* (Munich), vol. XXV, no. 4, 1975, p.363-365.

KRISTÓF, M. A könyvtárközi kölcsönzés helyzete és jövője. *Orvosi könyvtáros* (Budapest), vol. XVI, no. 1, 1976, p.112-121.

KURAMOTO, C. (Loan and photocopy service at Juntendo University Library. In Japanese.) *Igaku toshokan* (Tokyo), vol. XVII, no. 4, 1970, p.301-308.

KURITSYNA, N. Povyshat' kachestvo raboty MBA. *Bibliotekar* (Moscow), no. 6, 1975, p.61-62.

LAN, Q.S. Resource sharing in Singapore libraries. Paper presented at the IFLA/UNESCO Pre-Session Seminar for Librarians from Developing Countries. Antwerp, 1977.

LARSON, J.R. & TANEHILL, Jr., R.S. Problems in accessing scientific and technical serials. *Special libraries* (New York), vol. LXVIII, no. 7/8, 1977, p.241-251.

LEHMANN, K.D. Grenzen und Möglichkeiten des regionalen Leihverkehrs. *Zeitschrift für Bibliotkhekswesen und Bibliographie* (Frankfurt am Main), vol. XXIII, no. 1, 1976, p.1-8.

LELEIKENE, Ya. MBA: novoe polozhenie - novye trudnosti. *Bibliotekar* (Moscow), no. 5, 1972, p.59-62.

LEMBØL, H. Accessionskontor? Oplysningskatalog? Lånecentral? *Bogens verden* (Copenhagen), vol. LVI, no. 9/10, 1974, p.324-326.

LIINAMAA, M. & LOUNASSALO, M. *Fjärrlåneverksamheten inom biblioteksystomet*. Helsingfors, Huvudkommitten för Scandiaplanen, 1976. 76p. (Scandiaplanen skriftserie, 1)

LINE, M. Access to resources through the British Library Lending Division. Aslib proceedings (London), vol. XXVII, no. 1, 1975, p.8-15.

LINE, M.B. The British Library and the future of interlibrary lending. BLL review (Boston Spa), vol. III, no. 2, 1975, p.37-43.

LINE, M.B. The British Library Lending Division. In: SAUNDERS, W.L. (ed.). British librarianship today. p.86-108. London, Library Association, 1976. 378p.

LINE, M.B. Interlibrary lending in the social sciences: a note. Aslib proceedings (London), vol. XXIV, no. 8, 1972, p.445-448.

LINE, M. Interlibrary loan requests refused by libraries: the scope for improvement. National Central Library newsletter (London), no. 12, 1972, p.8-9.

LINE, M. Planning the British Library's lending services: further progress. National Central Library newsletter (London), no. 14, 1973, p.4-5.

LINE, M. Planning the British Library's lending services: progress report. National Central Library newsletter (London), no. 13, 1972, p.6-8.

LINE, M. Towards a better national lending system: planning the British Library's lending services. National Central Library newsletter (London), no. 12, 1972, p.4-5.

LINE, M.B. & EDE, S.J. Interlibrary lending statistics: their collection and use. BLL review (Boston Spa), vol. II, no. 2, 1974, p.44-50.

LINE, M.B. & PETRIE, H. Direct lending between libraries: results of an NCL pilot sample survey. NLL review (Boston Spa), vol. II, no. 6, 1973, p.177-181.

LINE, M.B. & SEAL, A. The ability of the British Library Lending Division to supply British publications on loan to other countries: report of a survey conducted in 1977. BLL review (Boston Spa), vol. V, no. 4, 1977, p.119-126.

LOHSE, G. Der Nulltarif als Störfaktor im Bibliotheksbetrieb. Mitteilungsblatt, Verband der Bibliotheken des Landes Nordrhein-Westfalen (Munich), vol. XXV, no. 1, 1975, p.35-38.

LOHSE, H. 'Verlorengegangene' Fernleihbestellungen: Ergebnisse einer Umfrage vom Januar 1973. Zeitschrift für Bibliotkhekswesen und Bibliographie (Frankfurt am Main), vol. XXI, no. 1, 1974, p.36-41.

LUCHT, I. & STEWART, B. The ACM Periodical Bank and the British National Lending Library: contrasts and similarities. In: SPYERS-DURAN, P. & GORE, D., (eds.). Management problems in serials work. Proceedings of the conference held at Florida Atlantic University, Boca Raton, Florida, March 26-27, 1973. p.3-18. Westport, Conn., Greenwood Press, 1974, 145p.

McELDERRY, S. Toward a national information system in the United States. Libri (Copenhagen), vol. XXV, no. 3, 1975, p.199-212.

McELDOWNEY, W.J. Interloan and book resources. New Zealand libraries (Wellington), vol. XXXVI, no. 4, 1973, p.227-240.

McELDOWNEY, W.J. New Zealand university library resources. Wellington, N.Z. Vice Chancellors' Committee, 1973. xiii, 177p.

McGRATH, W.E. & DYSON, S. Regional interlibrary loan: an old idea; a new tool and a new dimension. RQ (Chicago), vol. XIII, no. 4, 1974, p.293-298.

McQUISTON, M. A comparison of four modes of transmitting interlibrary loan requests. *RQ* (Chicago), vol. XV, no. 2, 1975, p.150-152.

MARTELL, C.R. *Interlibrary loan turnaround time: a study of performance characteristics of the University of California, Berkeley interlibrary loan lending operation*. Berkeley, California University, Institute of Library Research, 1975. iv, 34p. ED 104 413.

MASIUK, M. Chto tormozit razvitie MBA. *Bibliotekar* (Moscow), no. 3, 1967, p.10-11.

MAZANIK, I. & MARGOLINA, G. MBA v Belorussii. *Bibliotekar* (Moscow), no. 2, 1974, p.53-55.

MEETING of the working group on interlibrary lending, Ife-Ife, April 24-25 1974. Lagos, National Library, 1974. 47p.

MIELE, A.W. The Illinois State Library Microfilm Automated Catalog (IMAC). *Microform review* (Weston, USA), vol. II, no. 1, 1973, p.27-31.

MILLER, E.M. Telex and interlibrary loan. *New Zealand libraries* (Wellington), vol. XXXVI, no. 3, 1973, p.129-134.

MOLDOVEANU, V. Sistemul cataloagelor colective din Republica Socialistâ România si rolul lui în informarea documentara: realizări perspective, posibilitati de automatizare. *Probleme de informare și documentare* (Bucharest), vol. V, no. 8, 1971, p.471-487.

MONROE, E.J. *Lending patterns among large borrowing institutions in KOMRML*. Wayne State University, School of Medical Librarianship, 1972. 19 p. (Kentucky, Ohio, Michigan Regional Medical Library, Papers and reports, 13) ED 071 670.

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MORTON, E.H. Cooperation in Canada. *Library trends* (Champaign, USA), vol. XXIV, no. 2, 1975, p.399-415.

MUKERJEE, A.K. Inter-library loan and exchange of publications in India. *Indian librarian* (Jullundur City), vol. XX, no. 3, 1965, p.144-148.

MUNN, R.F. East African Literature Service. *Unesco bulletin for libraries* (Paris), vol. XXVII, no. 1, 1973, p.29-32.

MVS ve Stâtni vědecke knihovne v Olomouci. *Čtenář* (Prague), vol. XXI, no. 6, 1969, p.201.

NANCE, R.E. An analytical model of a library network. *Journal of the American Society for Information Science* (Washington), vol. XXI, no. 1, 1970, p.58-66.

NANCE, R.E. et al. A computer system for effective management of a medical library network. *Journal of library automation* (Chicago), vol. IV, no. 4, 1971, p.213-220.

NANCE, R.E. et al. Information networks: definitions and message transfer models. *Journal of the American Society for Information Science* (Washington), vol. XXIII, no. 4, 1972, p.237-247.

NATIONAL Library of Medicine Regional Medical Library Program policy statement. *Bulletin of the Medical Library Association* (Chicago), vol. LX, no.2, 1972, p.271-273.

NATTRASS, G.R. Interlibrary lending around the world - a review of recent papers. *BLL review* (Boston Spa), vol. IV, no. 1, 1976, p.11-16.

NATTRASS, G.R. Interlibrary lending around the world - a review of recent papers. III. *BLL review* (Boston Spa), vol. IV, no. 3, 1976, p.83-87.

NCLIS reports progress of task force on a national periodicals system. Washington, National Commission on Libraries and Information Science, 1976. 7p.

NDEGWA, J. Cooperative storage and interlending in East Africa. Paper presented at the IFLA/UNESCO Pre-Session Seminar for Librarians from Developing Countries. Antwerp, 1977.

NELSON ASSOCIATES, INC. *An evaluation of the New York State Library's NYSILL pilot program.* New York, Nelson Associates, 1968. 150p.

NELSON ASSOCIATES, INC. *Interlibrary loan in New York State.* New York, Nelson Associates, 1969. Various paging.

NEW, D.E. & OTT, R.Z. Interlibrary loan analysis as a collection development tool. *Library resources and technical services* (Chicago), vol. XVIII, no. 3, 1974, p.275-283.

NEWA, J.M. Cooperative acquisition in Tanzania: the role of the University of Dar es Salaam Library. Paper presented at the IFLA/UNESCO Pre-Session Seminar for Librarians from Developing Countries. Antwerp, 1977.

NEWMAN, W.L. Developments affecting the Canadian Union Catalogue. *Canadian library journal* (Ottawa), vol. XXXII, no. 4, 1975, p.313-323.

NEWSHAM, M.A. *Interlibrary loan borrowing: a methodology for analysis.* Denver, University of Denver, Graduate School of Librarianship, 1973, 120p.

NITECKI, D.A. Interlibrary services: report on a study measuring user awareness and satisfaction. Tennessee librarian (Nashville, USA), vol. XXVIII, no. 2, 1976, p.85-93.

NORTIER, M. Inter-library loans: some problems and possible solutions. Unesco bulletin for libraries (Paris), vol. XXVIII, no. 2, 1974, p.67-72.

NOZIK, B. The use status of books requested from the University of California, Berkeley, inter-library loan. Berkeley, California University, Institute of Library Research, 1974. ii, 11p. ED 104 411.

OLSON, P.E. The union catalog - its cost versus its benefit to a network. Special libraries (New York), vol. LXVII, no. 5/6, 1976, p.251-255.

ORGREN, C.F. Design of forms to assist in interlibrary communication of reference and information requests. Minnesota libraries (St. Paul, USA), vol. XXIV, no. 3, 1975, p.297-303.

ORR, R.H. & PINGS, V.M. Document retrieval: the national biomedical library system and interlibrary loans. Federation Proceedings (Bethesda, USA), vol. XXIII, no. 5, 1964, p.1155-1163.

PALLIER, D. et al. Statistiques du prêt interbibliothèques en 1975. (Bibliothèques universitaires, bibliothèques des grands établissements, bibliothèques municipales classées.) Bulletin des bibliothèques de France (Paris), vol. XXII, no. 5, 1977, p.259-321.

PALMER, J.E.C. The availability of published microform series of pre-1900 material. National Central Library newsletter (London), no. 13, 1972, p.8-11.

PALMOUR, V.E. et al. *Access to periodical resources; a national plan; prepared for the association of Research Libraries*. Rockville, Md., Westat, 1974. ix, 171, A-48p.

PALMOUR, V.E. Alternatives for increasing access to scientific journals. *IEEE Transactions. Professional Communication* (Piscataway, USA), vol. XVIII no. 3, 1975, p.210-215.

PALMOUR, V.E. et al. *Costs and effectiveness of interlibrary loan and reference activities of resource libraries in Illinois*. Springfield, Illinois State Library, 1972, 93p.

PALMOUR, V.E. et al. *Methods of financing interlibrary loan services*. Rockville, Md., Westat for the Association of Research Libraries, 1974. 119p. ED 090 997.

PALMOUR, V. et al. *A study of the characteristics, costs, and magnitude of inter-library loans in academic libraries*. Westport, Conn., Greenwood Publ., 1972. 127p.

PARK, K.H. Resource sharing in the Republic of Korea. Paper presented at the IFLA/UNESCO Pre-Session Seminar for Librarians from Developing Countries. Antwerp, 1977.

PARKER, E.E. Potential interrelationships between library and other mass media systems. In: BECKER, J. (ed.). *Proceedings of the conference on interlibrary communications and information networks*. Airlie House, Warrenton, Virginia, 1970. p.188-195. Chicago, American Library Association, 1971. vi, 347p.

Also in: CHISHOLM, M.E. (ed.). *Reader in media, technology and libraries*. p.416-428. Englewood, Microcard Editions, 1976. xi, 530p.

PARKER, Joan. Co-operation between libraries and inter-library loans. *Australian special libraries news* (Sydney), vol. VIII, no. 3, 1975, p.95-101.

PAULSSON, E. Inter-library loans in Sweden. *Scandinavian public library quarterly* (Ballerup), vol. I, no. 4, 1968, p.213-225.

PITERNICK, A.B. Inter-library loan brief presented to State Department. *Feliciter* (Ottawa), vol. XXII, no. 4, 1976.

PINGS, V.M. Improved document delivery services. *Library trends* (Champaign, USA), vol. XXIII, no. 1, 1974, p.89-107.

PINGS, V.M. *Inter-library loans - a review of library literature, 1876-1965*. Detroit, Wayne State University, 1966. 34p.

PINGS, V.M. *Monitoring and measuring document delivery service*. Bethesda, Md., National Library of Medicine, 1969. 18p. (Papers and reports, 2). ED 035 423.

PINGS, V.M. Regional Medical Library Program development. *Bulletin of the Medical Library Association* (Chicago), vol. LX, no. 2, 1972, p.274-283.

PINKWART, D. Direktbestellungen in Fernleihverkehr: Ergänzungen zur Berliner Untersuchung. *Mitteilungsblatt, Verband der Bibliotheken des Landes Nordrhein-Westfalen* (Munich), vol. XXIII, no. 2, 1973, p.128-139.

PLAISTER, J.M. The effect of the British Library Lending Division on inter-library lending. *Aslib proceedings* (London), vol. XXVIII, no. 5, 1976, p.193-203.

POPRUGA, L.B. Rabota MBA opornoi nauchno-tekhnicheskoi biblioteki. *Nauchnye i tekhnicheskie biblioteki SSSR* (Moscow), no. 6, 1976, p.16-19.

PORTER, K. Wanted an NLLNZ. New Zealand libraries (Wellington), vol. XXXVIII, no. 6, 1975, p.285-290.

PROCEEDINGS of the seminar on centralization and decentralization of the national bookstock. Pretoria, October 1971. Pretoria, State Library, 1973. vi, 228p. (Contributions to library science, no. 14)

RADFORD, N.A. Interlibrary co-operation in the service of the user. Australian library journal (Sydney), vol. XXIII, no. 5, 1974, p.167-171.

RAGHAV, S.K. Library cooperation: inter-library loans and book exchanges. Indian librarian (Jullundur City), vol. XXXI, no. 2, 1976, p.72-77.

REHBEIN, B. Zur Literaturversorgung der nebenberuflich geleiteten Gemeindebibliotheken im Rahnen des Kreisleihverkehrs. Bibliothekar (Leipzig), vol. XXIX, no. 7, 1975, p. 438-442.

REPORT on the 80th Meeting of the Association of Research Libraries, Atlanta, Georgia, May 12-13, 1972. Library of Congress information bulletin (Washington), vol. XXXI, no. 23, 1972, p.A-71-A-72.

The RHODESIAN interloan system. Rhodesian librarian (Salisbury), vol. II, no. 1, 1970, p.12-14.

ROBERTS, N. & BULL, G. Some implications of the trend in external borrowing by university libraries, 1910/61-1972/73. Journal of librarianship (London), vol. VIII, no. 3, 1976, p.153-165.

RØED, J.E. Fjernlån i Norge - og i Sverige. Bok og bibliotek (Oslo), vol. XLI, no. 4, 1974, p.195-199.

RØED, J.E. Om bruk og ikke-bruk av blanketter. Bok og bibliotek (Oslo), vol. XLII, no. 1/2, 1975, p.9.

RÖHLING, H. Analyse der in den Jahren 1969 bis 1971 von der Universitätsbibliothek Bochum versandten Fernleihbestellungen auf Slavica. In: LOHSE, G. & PFLUG, G. (eds.). Bibliotheksarbeit heute - Beiträge zur Theorie und Praxis: Festschrift für Werner Krieg zum 65 Geburtstag am 13 Juni 1973, p.311-334. Frankfurt am Main, Vittorio Klostermann, 1973. viii, 361p. (Zeitschrift für Bibliothekswesen und Bibliographie, Sonderheft 16).

RÖHLING, H. Der auswärtige Leihverkehr in Nordrhein-Westfalen 1971. Mitteilungsblatt, Verband der Bibliotheken der Landes Nordrhein-Westfalen (Munich), vol. XXII, no. 4, 1972, p.314-330.

RÖHLING, H. Der auswärtige Leihverkehr in Nordrhein-Westfalen 1972. Mitteilungsblatt, Verband der Bibliotheken des Landes Nordrhein-Westfalen (Munich), vol. XXIII, no. 4, 1973, p.311-326.

RÖHLING, H. Der auswärtige Leihverkehr in Nordrhein-Westfalen 1973. Mitteilungsblatt, Verband der Bibliotheken des Landes Nordrhein-Westralen (Munich), vol. XXIV, no. 4, 1974, p.287-303.

ROLLINS, J.G. New York State Inter-library Loan program; NYSILL 1974-75 annual report. Bookmark (New York), vol. XXXV, no. 2, 1976, p.28-34.

ROUSE, S.H. A selected review of the literature on interlibrary loan networks. Network (Tempe, USA), vol. II, no. 1, 1975, p.17-25.

ROUSE, W.B. A library network model. Journal of the American Society for Information Science (Washington), vol. XXI, no. 2, 1976, p.88-99.

ROUSE, W.B. & ROUSE, S.H. Assessing the impact of computer technology on the performance of inter-library loan networks. *Journal of the American Society for Information Science* (Washington), vol. XXVIII, no. 2, 1977, p.79-88.

ROUSE, W.B. & ROUSE, S.H. An interactive model for analysis of library networks. In: HUSBANDS, C.W. and TIGHE, R.L. (eds.). *Information revolution*. p.20-23. Washington, American Society for Information Science, 1975. 170p. (Proceedings of the 38th ASIS Annual Meeting. Vol. 12. Boston, October 1975).

RUMP, G.D. Wer hat Angst vor dem auswärtigen Leihverkehr? *Mitteilungsblatt, Verband der Bibliotheken des Landes Nordrhein-Westfalen* (Munich), vol. XXVI, no. 4, 1976, p.252-273.

SAAR, A. Inter-library loan code: questions and answers. *Arkansas libraries* (Little Rock, USA), vol. XXXIII, no. 1, 1976, p.26-28.

SAMOKHINA, N.G. The system of interlibrary loan in the USSR. *BLL review* (Boston Spa), vol. V, no. 1, 1977, p.13-17.

SAVAGE, N. Interlibrary loan; new $$ constraints and fees. *Library journal* (New York), vol. CII, no. 1, 1977, p.24-25.

SAVAGE, N. Metro meet on access: curse or cure? *Library journal* (New York), vol. CI, no. 22, 1976, p.2332-2535.

SAWYERS, E.J. Union list development: control of the serial literature. *Bulletin of the Medical Library Association* (Chicago), vol. LX, no. 3, 1972, p.427-431.

SCHENK, M.T. An academic science/engineering library's experience with a New York loan network. *Special libraries* (New York), vol. LXVII, no. 5/6, 1976, p.239-242.

SCHIEBER, W.D. & SHOFFNER, R.M. Telefacsimile in libraries - a report of an experiment in facsimile transmission and an analysis of implications for ILL systems. Berkeley, California University, Institute of Library Research, 1968. 391p. ED 019 106.

SCHLITT, G. Direktbestellung und Leihverkehr. Zeitschrift für Bibliothekswesen und Bibliographie (Frankfurt am Main), vol. XXIII, no. 1, 1976, p.9-21.

SCHMIDT, C.J. & SHAFFER, K.A. A cooperative inter-library loan service for the state-assisted university libraries in Ohio. College and research libraries (Chicago), vol. XXXII, no. 3, 1971, p.197-204.

SCHMIDT, H.W. Probleme der Anwendung der wissenschaftlichen Arbeitsorganisation in den Bibliotheken, dargestellt am Beispiel der Kostenrechnungs-untersuchung an der Bibliothek der Technischen Hochschule Magdeburg. Zentralblatt für Bibliothekswesen (Leipzig), vol. LXXXVII, no. 6, 1973, p.340-350.

SCHMIEDECKE, K. Zur Weiterführung des Zentralkatalogs der DDR - Zeitschriften und Serien des Auslands (ZKZ). Zentralblatt für Bibliothekswesen (Leipzig), vol. LXXXIX, no. 10, 1975, p.458-463.

SCHMITZ-VELTIN, G. Die Dauer der Literaturbeschaffung im auswärtigen Leihverkehr durch die hessische Landes-und Hochschulbibliothek Darmstadt. Zeitschrift für Bibliothekswesen und Bibliographie (Frankfurt am Main), vol. XVIII, no. 2, 1971, p.118-122.

SCHWEIGLER, P. Der Leihverkehr der Spezialbibliotheken im Rahmen des Leihverkehrs der deutschen Bibliotheken. In: KAEGBEIN, P. et al. (eds.). Bibliothekarische Kooperation: Aspekte und Möglichkeiten. Vorträge, gehalten auf dem Bibliothekscongress 1973 vom 12. bis 16. Juni in Hamburg, p.263-270. Frankfurt am Main, Vittorio Klostermann, 1974. 314p. (Zeitschrift für Bibliothekswesen und Bibliographie, Sonderheft, 18.)

SERIKI, T.A.B. Problems of interlibrary cooperation among Nigerian medical libraries. *Special libraries* (New York), vol. LXIV, no. 12, 1973, p.566-570.

SHERIFF, G.M. Resource sharing in West Africa: some implications for the development of national information policies. Paper presented at the IFLA/UNESCO Pre-Session Seminar for Librarians from Developing Countries. Antwerp, 1977.

SHIMIZU, S. (Foreign periodical collections and request by interlibrary loan - an experimental survey. In Japanese.) *Igaku toshokan* (Tokyo), vol. XVII, no. 4, 1970, p.309-313.

SHUMAN, B.A. WATS happening in North Carolina: 'Wide Area Telephone Service' in North Carolina speeds interlibrary loan to the most remote communities. *Library journal* (New York), vol. XCIV, no. 5, 1969, p.945-947.

SIM, F.K. Loan services of academic libraries: problems and solutions. In: TEE, L.H. & BEGUM, R. (eds.). *National and academic libraries in Malaysia and Singapore. Proceedings of a PPM & LAS conference*. Penang, March 1974. p.108-113. Penang, Persatuan Perpustakaan Malaysia and Library Association of Singapore, 1975. vi,218p.

SIMPKINS, I.F. National collection: its growth and accessibility. In: *Academic library: essays in honor of Guy R. Lyle*. p.118-136. Metuchen, N.J., Scarecrow Press, 1974. 171p.

SINOGOWITZ, B. Die Arbeiten an einer Revision der Leihverkehrsordnung. In: OTTO, F. and KAEGBEIN, P. (eds.). *Arbeitsgemeinschaft der Spezialbibliotheken (ASpB): Bericht über die 15. Tagung in Dusseldorf 18 bis 21 Marz 1975*. p.71-75. Berlin, Universitätsbibliothek der Technische Universität Berlin, Abteilung Publikationen, 1976. 260p.

SMITH, M.D. Interlending in the West Midlands; a comparative study of the services provided by the West Midland Regional Library System and the British Library Lending Division. BLL review (Boston Spa), vol. V, no. 1, 1977, p.3-7.

SOŠKOVA, E. K problému rajonizace meziknihovných výpůjcních služeb. Technická knikovna (Prague), no. 3, 1964, p.56-58.

SPENCER, C.C. Random time sampling with self-observation for library cost studies: unit costs of interlibrary loans and photocopies at a regional medical library. Journal of the American Society for Information Science (Washington), vol. XXII, no. 3, 1971, p.153-160.

STAPLES, E.R. Interlibrary lending of periodicals: a survey. Southeastern librarian (Tucker, USA), vol. XVI, no. 1, 1966, p.32-35.

STENKILDE, H. Den interurbane lånevirksomhed. Bogens verden (Copenhagen), vol. LI no. 7/8, 1969, p.580-589.

STENSTROM, R.H. Cooperation between types of libraries 1940-1968; an annotated bibliography. Chicago, American Library Association, 1970. viii, 157p.

STEVENS, R.E. A feasibility study of centralized and regionalized inter-library loan centers. Washington, Association of Research Libraries, 1973. 65p. ED 076 206.

STEVENS, R.E. A study of interlibrary loan. College and research libraries (Chicago), vol. XXXV, no. 5, 1974, p.336-343.

STEWART, D.W.C. RSM and BLLD: the role of a back-up library. Library Association Medical Section bulletin (Southampton, England), no. 107, 1976, p.1-4.

STRING, G.E. What's involved in loaning books. PNLA quarterly (Ashland, USA), vol. XL, no. 2, 1976, p.7-11.

STUART, M. Some effects on library users of the delays in supplying publications. Aslib proceedings (London), vol. XXIX, no. 1, 1977, p.35-45.

STUART-STUBBS, B. An historical look at resource sharing. Library trends (Champaign, USA), vol. XXIII, no. 4, 1975, p.649-664.

STUART-STUBBS, B. et al. Interlibrary loan in Canada. A report of a survey. Ottawa, National Library of Canada, 1976. 236p.

STUART-STUBBS, B. et al, A survey and interpretation of the literature of interlibrary loan. Vancouver, University of British Columbia Library, 1975. 158p.

SUHNHOLD, K.H. Zur Rationalisierung der Ausleihkontrolle bei der mobilen Literaturversorgung. Bibliothekar (Leipzig), vol. XXVII, no. 9, 1973, p.581-586.

TABLEAU du fonctionnement du prêt interbibliothèques pendant l'été 1976. Bulletin DICA (Paris), vol. I, no. 5, 1976, p.31-35.

TAWETE, F.K. The need for resource sharing among libraries in Tanzania. Paper presented at the IFLA/UNESCO Pre-Session Seminar for Librarians from Developing Countries. Antwerp, 1977.

TEHNZEN, J. 'Anhaltszahlen' - ein Versuch in der UB/TIB Hannover. Bibliotheksdienst (Berlin), no. 4, 1974, p.188-190.

TEHNZEN, J. Die Zentralen Fachbibliotheken im Leihverkehr der Spezialbibliotheken. In: KAEGBEIN, P. et al. (eds.). Bibliothekarische Kooperation: Aspekte und Möglichkeiten, Vorträge, gehalten auf dem Bibliothekscongress 1973 vom 12. bis 16. Juni in Hamburg, p.271-274. Frankfurt am Main, Vittorio Klostermann, 1974. 314p. (Zeitschrift für Bibliothekswesen und Bibliographie, Sonderheft 18.)

TEHNZEN, J. Zur Effizierung des Leihverkehrs der deutschen Bibliotheken. Bibliotheksdienst (Berlin), no. 6, 1976, p.300-310.

TEHNZEN, J. & JACOB, W. Probleme der Literatur-Versorgung: Überlegungen nach einem Besuch der National Lending Library, Boston Spa, England. Nachrichten für Dokumentation (Munich), vol. XXIV, no. 4/5, 1973, p.167-178.

TEHNZEN, Jobst & JACOB, Wilhelm. Die regionalen Zentralkataloge, die "Negativstelle" und das GAZS. Berlin, Deutscher Bibliotheksverband, Arbeitsstelle für das Bibliothekswesen, 1975. 177p. (Bibliotheksdienst, Beiheft 116/117).

TELL, B.V. Regional co-operation in information. Unesco bulletin for libraries (Paris), vol. XXX, no. 3, 1976, p.130-139.

TERRY, M.J.C. Scandiaplan report on interlibrary lending: a summary. BLL review (Boston Spa), vol. V , no. 1, 1977, p.22-25.

THOMSON, S.K. Interlibrary loan involving academic libraries. Chicago, American Library Association, 1970. 127p. (ACRL monograph, 32).

TOTTIE, T. Interurbanutlåningen från national- och universitetsbiblioteken. Biblioteksbladet (Lund), vol. LI, no. 10, 1966, p.735-742.

TREZZA, A.F. Toward a national periodical system. Special libraries (New York), vol. LXVIII, no. 1, 1977, p.7-12.

URQUHART, D.J. Forms and the NLL - towards a national interlibrary request form. Library Association record (London), vol. LXXII, no. 5, 1970, p.183-187.

URQUHART, D.J. Interlibrary services in the UK. NLL review (Boston Spa), vol. I, no. 1, 1971, p.14-16.

URQUHART, D.J. Lending activities of the British Library. In: LOWE, S.J. (ed.). Proceedings of the 20th Annual Conference and Study Course, Norwich, April 7th-10th, 1972, p.25-38. London, Library Association, Reference, Special and Information Section, 1973. 71p.

URQUHART, D.J. National lending/reference libraries or libraries of first resort. BLL review (Boston Spa), vol. IV, no. 1, 1976, p.7-10.

URQUHART, D.J. National role in resource allocation. Library trends (Champaign, USA), vol. XXIII, no. 4, 1975, p.595-601.

URQUHART, D.J. The Regional Bureaux and the NLL. Library Association record (London), vol. LXXII, no. 1, 1970, p.11-14.

VARFOLOMEEVA, M.V. Mezhdubibliotechnyi abonement v bibliotekakh Akademii nauk SSSR i akademii nauk soyuznykh respublik. Sovetskoe bibliotekovedenie (Moscow), no. 5, 1974, p.87-99.

VICKERS, S. Interlibrary lending around the world - a review of recent papers - IV. BLL review (Boston Spa), vol. V, no. 1, 1977, p.18-21.

VICKERS, S. Interlibrary lending around the world - a review of recent papers - V. BLL review (Boston Spa), vol. V, no. 3, 1977, p.100-105.

VICKERY, J.E. Philosophers, libraries and the BLLD. BLL review (Boston Spa), vol. IV, no. 3, 1976, p.79-82.

VINZENT, O. Organisationsmodell für den Leihverkehr in wissenschaftlichen Universalbibliotheken, dargelegt am Beispiel der Universitätsbibliothek Saarbrücken. Zeitschrfit für Bibliothekswesen und Bibliographie (Frankfurt am Main), vol. XXIII, no. 2, 1976, p.87-93.

VOGEL, D. Leihverkehrswege für Spezialbibliotheken. In: KAEGBEIN, P. et al. (eds.). Bibliothekarische Kooperation: Aspekte und Möglichkeiten. Vorträge gehalten auf dem Bibliothekscongress 1973 vom 12. bis 16. Juni in Hamburg, p.257-262. Frankfurt am Main, Vittorio Klostermann, 1974. 314p. (Zeitschrift für Bibliothekswesen und Bibliographie, Sonderheft 18).

VOGT, W. Modellversuch am Bayerischen Zentralkatalog zur zentralen Weiterleitung der unter die 'Empfehlungen zur Verbesserung des Leiverkehrs' fallenden Bestellungen. Bibliotheksforum Bayern (Munich), vol. IV, no. 1, 1976, p.36-39.

VOIGT, R. Bayerische Leihverkehr und Ergänzungsbüchereien. Neue Bücherei (Munich), no. 3, 1970, p.258-260.

VOIGT, R. Bayerischer Leihverkehr und Ergänzungsbüchereien 1970. Neue Bücherei (Munich), no. 6, 1971, p.498-500.

WAKNIS, T.D. Library co-operation in India. Indian librarian (Jullundur City), vol. XXXI, no. 2, 1976, p.61-66.

WALFORD, A.J. Circulation, loan & inter-library loan. In:BATTEN, W.E. ed. Handbook of special librarianship and information work, p.269-298. 4th ed. London, Aslib, 1975. vii, 430p.

WARNER, E.S. A tentative analytical approach to the determination of interlibrary loan network effectiveness. *College and research libraries* (Chicago), vol. XXXII, no. 3, 1971, p.217-221.

WEES, I. Lending policies of Canadian libraries. *Canadian library journal* (Ottawa), vol. XXVII, no. 1, 1970, p.40-50.

WERHAHN, H.M. *Leihverkehr der Bibliotheken.* Berlin, Deutscher Bibliotheksverband, Arbeitsstelle für das Büchereiwesen, 1971. 65p. (*Bibliotheksdienst*, Beiheft 70).

WILCOX, A.E. Networks: descriptions of operational systems; Minnesota Interlibrary Teletype Exchange (MINITEX). In: ANDERSON, L.W. (ed.). *Networks and the university library.* p.23-29. Chicago, Association of College and Research Libraries, 1974. iv, 90p.

WILCOX, A.E. & MARSHALL, N.H. MINITEX and WILS: responses to access needs. *RQ* (Chicago), vol. XIII, no. 4, 1974, p.299-307.

WILLIAMS, G. Interlibrary loan service in the United States. In: BARR, K. & LINE, M. (eds.). *Essays on information and libraries.* p.193-206. London, Clive Bingley, 1975. 211p.

WILLIAMS, G. Inter-library loans: the experience of the Center for Research Libraries. *Unesco bulletin for libraries* (Paris), vol. XXVIII, no. 2, 1974, p.73-78.

WILLS, M. Direct lending between libraries. *National Central Library newsletter* (London), no. 13, 1972, p.12-13.

WILLS, M. The evaluation of NCL's 'locations' experiment. *National Central Library newsletter* (London), no. 12, 1972, p.7-8.

WILSON, R.G. Interlibrary loan experiments at the University of Calgary. Canadian library journal (Ottawa), vol. XXX, no. 1, 1973, p.38-40.

WIMAN, K. Interurbanlån vid svenska bibliotek: undersökning utförd på uppdrag av Sveriges Allmänna Biblioteksförening. Lund, Bibliotekstjänst, 1974. 126p.

WINTERMEIER, W. & RICHTER, W Analyse der abgesandten Fernleihbestellungen aus dem Jahr 1972 an der Universitätsbibliothek Bochum zu germanistischer Literatur Mitteilungsblatt, Verband der Bibliotheken des Landes Nordrhein-Westfalen (Munich), vol. XXIV, no. 3, 1974, p.246-251.

WITTIG, G.R. CONSER (co-operative conversion of serials project): building an on-line international serials data base. Unesco bulletin for libraries (Paris), vol. XXXI, no. 5, 1977, p.305-310.

WOODWARD, W.B. Interlibrary loan usage within Durham University Library, science section 1973/74. Aslib proceedings (London), vol. XXVIII, no. 8, 1976, p.271-278.

WOOTTON, C.B. & EDE, S.J. The BLLD success rate study 1976. BLL review (Boston Spa), vol. V, no. 2, 1977, p.53-66.

YAKUNIN, N.A. & TOSKINA, T.A. Das System des Leihverkehrs der Bibliotheken im Gesundheitswesen der UdSSR. Zentrablatt für Bibliothekswesen (Leipzig), vol. LXXXIX, no. 4, 1975, p.175-178.

YAP, S.F. The location service of the BLLD: a study of its effectiveness. BLL review (Boston Spa), vol. II, no. 4, 1974, p.115-123.

YASKEROVICH, Ts. MBA - uchastok boevoi. Bibliotekar (Moscow), no. 4, 1969, p.54-56.

YEMEEVA, N. MBA: uspekhi i orgorcheniya. Bibliotekar (Moscow), no. 2, 1972, p.47-50.

ZETHSON, S.E. Inter-urban lending centres in Sweden. Scandinavian public library quarterly (Ballerup), vol. IX, no. 1, 1976, p.18-23.

ZUNKER, E. Die Ausstattung der Leihverkehrsregionen mit deutschsprachigen Monographien ab Erscheinungsjahr 1945. Berlin, Deutscher Bibliotheksverband, Arbeitsstelle für das Bibliothekswesen, 1977. 54p. (Bibliotheksdienst, Beiheft 126).

ZUNKER, E. Der Leihverkehr in der deutschen Bundesrepublik nach der Einschaltung der Zentralkataloge und dem Erlars der Leihverkehrsordnung 1966. Nordisk tidskrift för bok- och biblioteksvasen (Stockholm), vol. LIV no. 3, 1967, p.65-80.

ZUNKER, E. Veränderungen des Leihverkehrsbildes nach der Einschaltung der Zentralkataloge: Region des ZK Baden Württemberg. Libri (Copenhagen), vol. XIX, no. 2, 1969, p.126-137.

ADDENDA

ARMS, W.Y. Duplication in union catalogues. *Journal of documentation* (London), vol. XXIX, no. 4, 1973, p.373-379.

CARROLL, B & WOOD, N. *Scientific and technical information in Ireland: the findings of the national documentation use study*. Dublin, National Science Council, 1978. 2 vols. 58p, 94p.

ENGELSTAD, K & RØED, J.E. eds. *Inter-library lending - the challance of cooperation*. Lectures and discussion held at the conference on inter-library lending. Lysebu, Oslo, August 1977. Oslo, Hovedkomiteen for Scandiaplanen. 1978. 154p. (*Scandiaplanen skriftserie* no. 4).

HEYDRICH, J. Der auswärtige Leihverkehr der Bibliotheken in Nordrhein-Westfalen 1976. *Mitteilungsblatt, Verband der Bibliotheken des Landes Nordrhein-Westfalen* (Munich), vol. XXVII, no. 3, 1977, p.229-248.

KING, D.W. & RODERER, N.K. Economic considerations for interlibrary loan networks. In: FRY, B. & SHEPHERD, C.A. (comps). *Information management in the 1980's*. Proceedings of the 40th ASIS annual meeting. New York, Knowledge Industry Publications for American Society for Information Science, 1977.

LINE, M.B. & STEEMSON, R.J. *Interlibrary lending in the United Kingdom: report of a national survey carried out in February 1977*. London, British Library, 1978. 37p. (British Library R&D Report 5417).

LINE, M.B. & STEEMSON, R.J. Interlibrary lending in the United Kingdom: summary report of a national survey conducted in February 1977. *Interlending review* (Boston Spa), vol. VI, no. 2, 1978, p.31-38.

MARTIN, J.K. Computer based literature searching. Impact on interlibrary loan service. *Special libraries* (New York), vol. LXIX, no. 1, 1978, p.1-6.

PALLIER, D. & LUPOVICI, C. Statistiques du prêt interbibliothèques en France en 1976. (Bibliothèques universitairs, bibliothèques des grands établissements, bibliothèques municipales classées). *Bulletin de la DICA* (Paris), vol. III, no. 5-6, 1978, p.43-115.

ROUSE, S.H. & ROUSE, W.B. Design of a model-based online management information system for interlibrary loan networks. In: FRY, B & SHEPHERD, C.A. (comps.). *Information management in the 1980's*. Proceedings of the ASIS 40th annual meeting. New York, Knowledge Industry Publications for American Society for Information Science, 1977.

SAMOKHINA, N.G. Mezhbibliotechnyi abonement v SSSR na soviemennom etape. [Interlibrary loans in the USSR today]. *Sovetskoe bibliotekovedenie* (Moscow), no. 5, 1977, p.38-50.

STEEMSON, R.J. Locations survey, 1977. *Interlending review* (Boston Spa), vol. VI, no. 1, 1978, p.23-25.

STEEMSON, R.J The performance of the British Library Lending Division International Photocopy Service. *Interlending review* (Boston Spa), vol VI, no. 3, 1978, p.94-96.

VICKERS, S. Interlibrary lending around the world - a review of recent papers - VI. *Interlending review* (Boston Spa), vol. VI, no. 1, 1978, p.18-22.